DOCUMENT RESUME

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AUTHOR	Pettit, Glen; And Others
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ABSTRACT

This instructional package on the vocational area of graphics is designed for visually impaired students. Contained in this document are thirteen learning modules organized into eight units: layout and design; paste-up; camera (photomechanical reproduction); stripping; presswork; finishing and bindery; special processes; and photography (continuous tone). Each module, printed in large block type, includes these elements: a performance objective page telling what will be learned, what materials will be needed and how the student will be evaluated; information and job step pages which tell why the student is learning this task and detail the job steps necessary to do it. Illustrations are designed for the visually impaired. (This document is one of three sets of learning modules on graphics. The other two sets are written in formats designed for educable mentally impaired and for regular and low reader students. The modules are part of a total set of over 1,300 written for different student populations. Building maintenance, dietetic assistant, small engine repair, and medical assistant are the other vocational areas covered. CE 017 554 is the final report of the project to develop the modules.) (JH)

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ED158082

CAPITAL AREA CAREER CENTER
Ingham Intermediate School District
611 Hagadorn Road
Mason, Michigan 48854

TO: MULTIPLE LEARNING STRATEGIES PROJECT

GRAPHICS
Visually Impaired

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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CE 017 560

graphics

unit: LAYOUT AND DESIGN

capital area career center

module: 1401 07 007 7 **date:** **level:**

skill title: SINGLE AND BOOK PAGE MARGINS

developed & written by: GLEN PETTIT & NANCY LOMBARDI

visuals by: NANCY LOMBARDI

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO DETERMINE THE FOUR-PAGE MARGINS IN A BOOK.

IN ORDER TO DO THIS YOU WILL NEED:

BASIC LAYOUT AND DESIGN EQUIPMENT

SIZES OF TWO BOOK PAGES

WE WILL KNOW YOU CAN DO IT WHEN:

YOU PRODUCE PLEASING AND ATTRACTIVE MARGIN ARRANGEMENT WHICH WILL CONFORM TO THE BOOK INDUSTRY'S STANDARDS.

WORD GUIDE

NARROW - CLOSE, TIGHT.

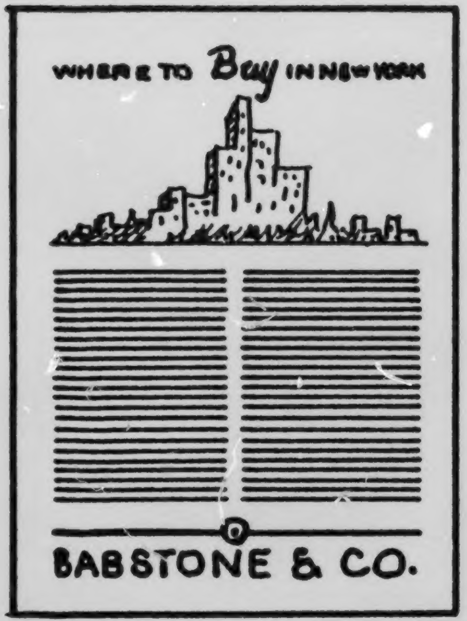
INFORMATION

SINGLE PAGE MARGINS:

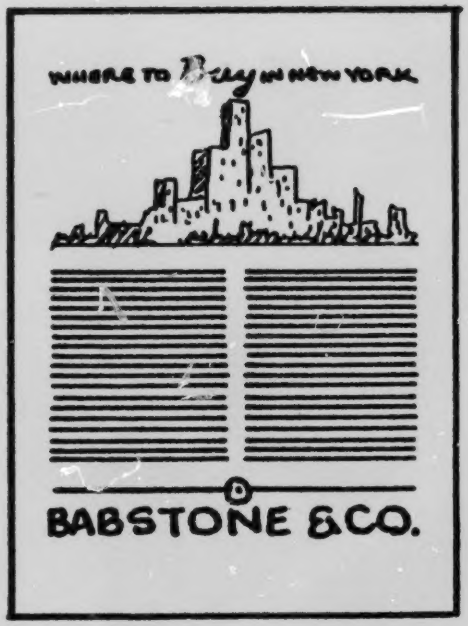
THE LAYOUT PERSON SHOULD ALWAYS GIVE CAREFUL CONSIDERATION TO THE WHITE SPACE, OR MARGINS, AROUND A PRINTED PAGE. THE AMOUNT OF MARGINAL SPACE IS DETERMINED BY THE ARRANGEMENT OF THE PAGE. A PAGE CONTAINING A LOT OF COPY WOULD HAVE TO BE SET IN A SMALL SIZE TYPE AND THE MARGINS SHOULD BE NARROW. IF THE MARGINAL SPACE WAS WIDE, IT WOULD MAKE THE SMALL TYPE APPEAR CROWDED. A PAGE SET IN A LARGE SIZE TYPE, ARRANGED WITH CONSIDERABLE WHITE SPACE, WOULD REQUIRE WIDE MARGINS. REMEMBER: A PAGE THAT APPEARS CROWDED SHOULD HAVE NARROW MARGINS AND AN OPEN PAGE SHOULD HAVE WIDE MARGINS.

INFORMATION

THE WHITE MARGIN SPACE AROUND A PAGE SHOULD NOT BE THE SAME ON ALL FOUR SIDES, BUT SHOULD VARY. THE MOST PLEASING ARRANGEMENT FOR SINGLE PAGE MARGINS IS THAT IN WHICH BOTH SIDES ARE THE SAME AND BOTH ARE NARROW. THE TOP SHOULD BE A LITTLE WIDER AND THE FOOT (BOTTOM) THE WIDEST.


WHERE TO Buy IN NEW YORK
BABSTONE & CO.

wrong


WHERE TO Buy IN NEW YORK
BABSTONE & CO.

correct

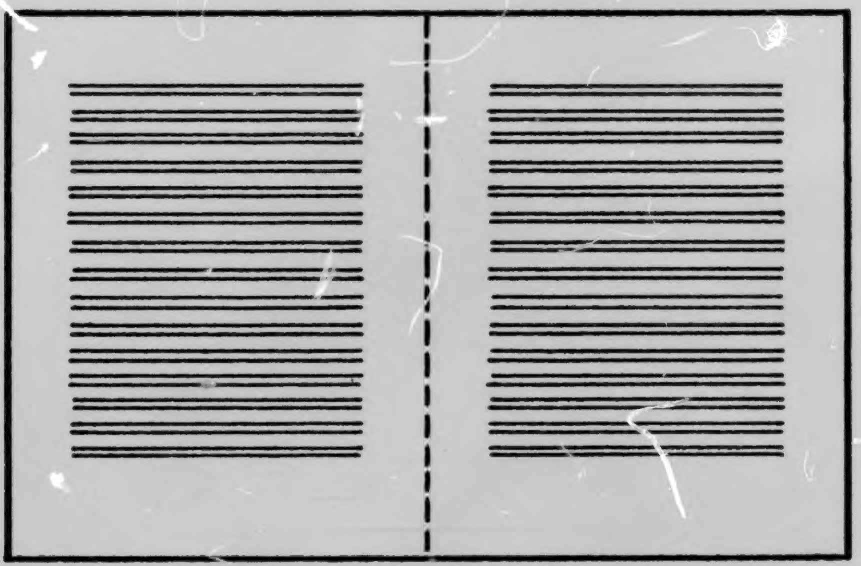
INFORMATION

THE BOTTOM MARGIN ON ALL PRINTED MATTER SHOULD BE WIDEST BECAUSE THE HUMAN EYE SEES THE CENTER OF THE PAGE (THE OPTICAL CENTER) ABOVE THE ACTUAL MEASURED CENTER. IF WE BALANCE THE TYPE PAGE ON THE OPTICAL CENTER LINE, THE BOTTOM MARGIN WILL BE WIDER THAN THE TOP AND TO THE READER THE TYPE WILL APPEAR CENTERED.

INFORMATION

BOOK MARGINS:

WHEN A SHEET OF PAPER IS FOLDED, THE CREASE DIVIDED IT INTO TWO FACING PAGES (AS IN BOOKS). IF WE FOLLOW THE METHOD JUST DESCRIBED FOR LAYING OUT SINGLE PAGE MARGINS, THE TWO FACING PAGES WOULD APPEAR LIKE THIS:



INFORMATION

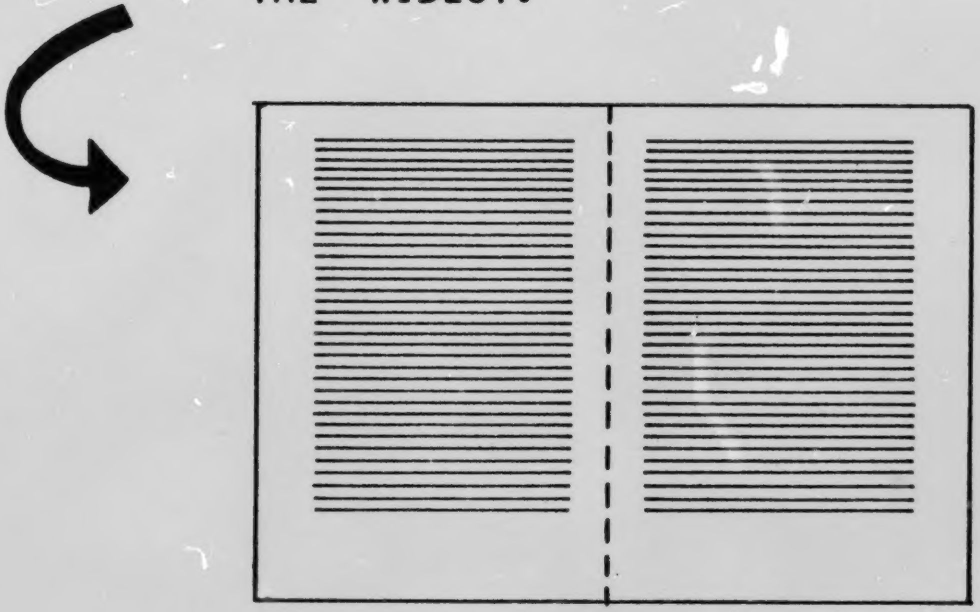
IN THIS CASE, THE TWO MARGINS JOIN TOGETHER AT THE FOLD TO FORM A WIDE BANK OF WHITE LARGER THAN ANY OF THE REMAINING MARGINS. THIS SEPARATES THE TWO GROUPS OF TYPE SO THAT THEY SEEM TO HAVE NOTHING IN COMMON. FOR THIS REASON, WE CANNOT USE THE SINGLE PAGE MARGIN RULE IN BOOKS.

THE MARGINS IN THE ABOVE FIGURE COULD BE MADE MORE PLEASING IF THE TWO AREAS WERE BROUGHT CLOSER TOGETHER, TOWARD THE FOLD LINE. THERE IS NO ONE SET RULE THAT TELLS US HOW CLOSE TO BRING THE TYPE PAGES OR HOW TO PROPORTION THE MARGINS, BUT THERE IS A POPULAR METHOD THAT IS IN USE TO ESTABLISH THE MARGINAL SPACE IN BOOKS.

INFORMATION

IN ALL PLEASING ARRANGEMENTS OF BOOK MARGINS THERE IS A PROGRESSION OF WIDTHS:

1. THE INNER MARGIN IS NARROWEST.
2. THE HEAD OR TOP MARGIN IS SLIGHTLY WIDER.
3. THE OUTSIDE MARGIN IS NEXT IN WIDTH.
4. THE BOTTOM OR FOOT MARGIN IS THE WIDEST.



INFORMATION

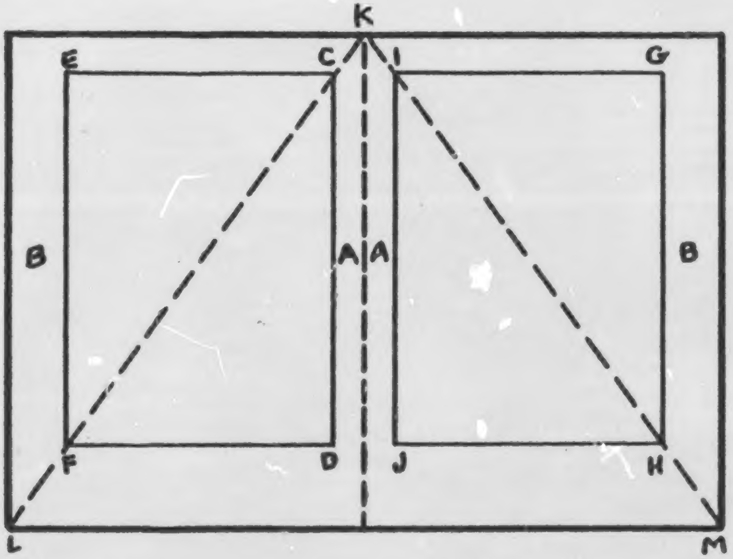
METHOD USED TO DETERMINE BOOK MARGINS:
(SEE ILLUSTRATION ON NEXT PAGE)

1. AFTER CONSIDERING THE SIZE TYPE TO BE USED, SELECT AN APPROPRIATE WIDTH FOR THE OUTSIDE MARGIN (B).
2. MAKE THE MARGIN AT THE GUTTER (A) ONE HALF THAT ON THE OUTSIDE (B) AND DRAW VERTICAL LINES CD, EF, GH, AND IJ.
3. DRAW THE DIAGONAL LINES KL AND KM. (TOP FOLD LINE TO BOTTOM OUTSIDE CORNERS.)
4. THE TOP MARGIN WILL BE LOCATED WHERE THE DIAGONAL LINES CROSS THE VERTICAL LINES AT C AND I. DRAW THE TOP MARGIN LINES EC AND IG.

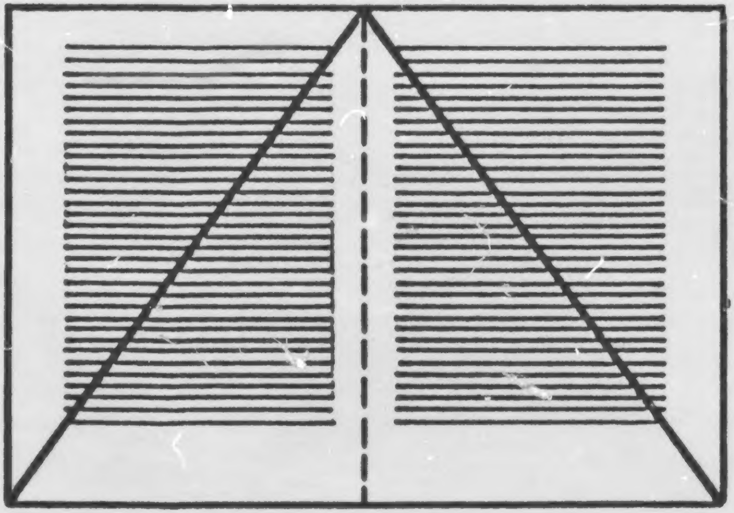
INFORMATION

5. THE BOTTOM MARGIN WILL BE LOCATED WHERE THE DIAGONAL CROSSES AT F AND H. DRAW THE MARGIN LINES FD AND JH.

6. THE MARGINS WILL THEREFORE APPEAR WITH THE INSIDE NARROWEST, TOP A LITTLE WIDER, OUTSIDE STILL WIDER AND BOTTOM WIDEST.



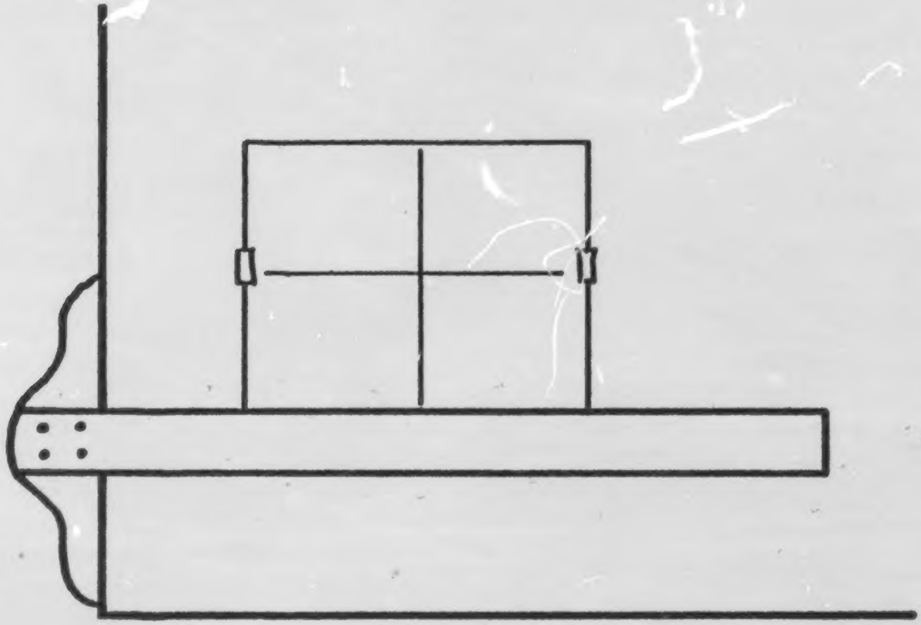
INFORMATION



THERE ARE MANY OTHER METHODS OF WHICH THE ABOVE DIAGONAL METHOD IS EASIEST. RECENTLY, SINCE 1971, THERE HAS BEEN A TREND TO REDUCE OR CROWD THE MARGINS TO SAVE PAPER. FOR YOUR WORK, WE'LL USE THE TRADITIONAL DIAGONAL METHOD DESCRIBED ABOVE.

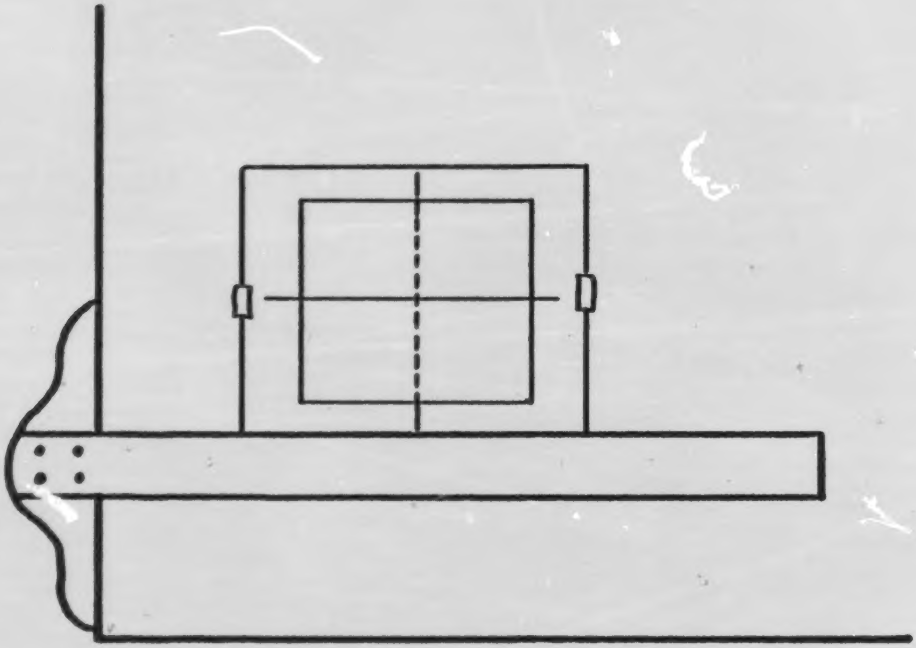
JOB STEPS

1. TAPE THE PAGE TO THE TABLE WITH THE 11" RUNNING WIDTHWISE. DRAW YOUR CENTERING LINES.



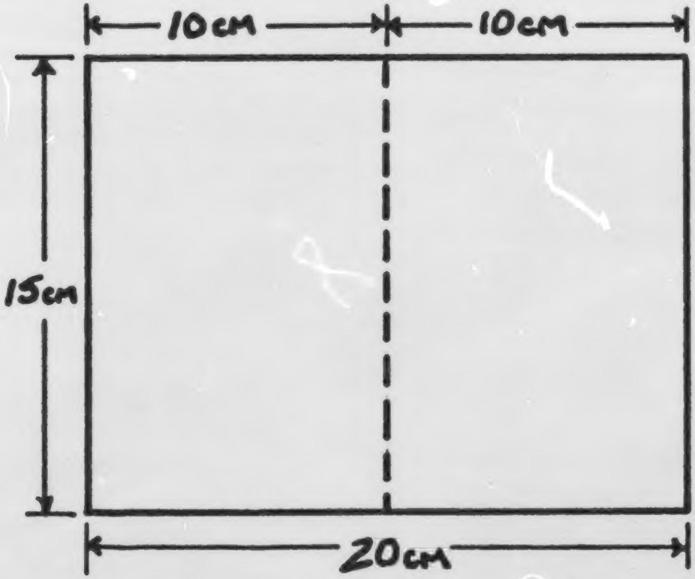
JOB STEPS

2. DRAW TWO BOOK PAGES FACING (PAGE SIZE IS 10 CM X 15 CM). INDICATE THE FOLD WITH A DOTTED LINE. FOR MORE INFORMATION ABOUT CENTIMETERS, REFER TO MET 03 003, READ RULER TO THE NEAREST CENTIMETER.



JOB STEPS

3. INDICATE THE OUTSIDE MEASUREMENTS IN CENTIMETERS, IN THE STYLE SHOWN:



4. USING THE DIAGONAL METHOD FOR DETERMINING BOOK MARGINS, FIND THE PROPER MARGINS (PAGE 8 OF THIS MOD). THE TYPE WILL BE SET 18 PICAS WIDE: USE LIGHT BLUE LINES TO INDICATE THE TYPE IMAGE MARGINS. **TURN PAGE →**

JOB STEPS

5. IF THIS PAGE WAS SET IN 10 PT. TYPE WITH 2 PT. LEADING (1 PICA FOR EACH LINE), HOW MANY LINES COULD BE SET PER PAGE? WRITE YOUR ANSWER IN LARGE NUMBERS IN THE CENTER OF THE PAGE IMAGE ON THE LAYOUT.

6. ON EACH PAGE, SHADE IN AREAS WHERE THE INDIVIDUAL LINES OF TYPE WOULD BE.

7. COVER WITH TISSUE OVERLAY.

8. SECURE YOUR AREA.

9. HAVE THE INSTRUCTOR CHECK AND EVALUATE YOUR WORK.

10. GO ON WITH MOD 07 008 7.

graphics

unit: PREPARING COPY FOR REPRODUCTION

capital area career center

module: 1401 09 003 7 date: 7/77 level: III

skill title: PROJECT: PASTE-UP A MODULE

developed & written by: NANCY LOMBARDI

visuals by: NANCY LOMBARDI

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO PASTE-UP A MODULE.

IN ORDER TO DO THIS YOU WILL NEED:

- T-SQUARE
- TRIANGLE
- RULER
- ADHESIVE
- BURNISHER
- SCISSORS

- MASKING TAPE
- 8½" X 11" #32 LEDGER
- LIGHT BLUE PENCIL
- MODULE COPY (ARTWORK, TYPEWRITTEN MANUSCRIPT
- SAMPLE MODULE (FOR STYLE)

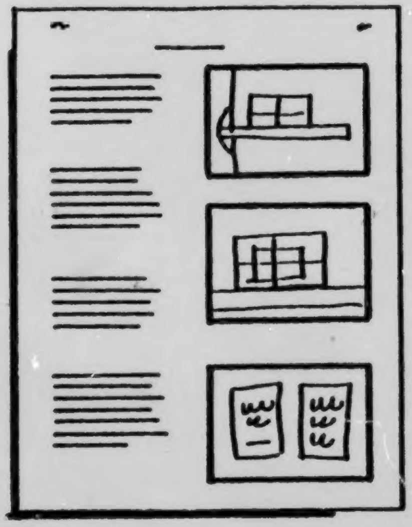
WE WILL KNOW YOU CAN DO IT WHEN:

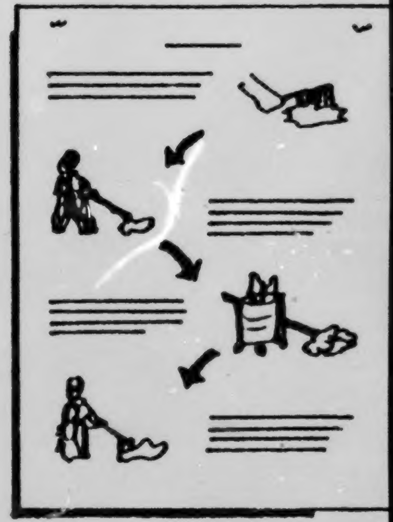
YOUR FINAL PASTE-UP IS NEAT AND CLEAN, ACCURATE AND "SQUARE", AND MATCHES THE OTHER MODULES IN THAT UNIT AREA IN APPEARANCE.

INFORMATION

MODULES LIKE THIS ONE HAVE A CERTAIN "LOOK" OR STYLE. ASK YOUR INSTRUCTOR FOR SEVERAL DIFFERENT KINDS OF MODS ("SMALL ENGINE REPAIR"; "GRAPHICS"; "BUILDING MAINTENANCE"). GET AT LEAST THREE OF EACH KIND AND LOOK THEM OVER CAREFULLY. NOTICE HOW THEY ARE LAID OUT. COMPARE THEM TO EACH OTHER AND SEE WHAT MAKES EACH KIND (SUCH AS THE GRAPHICS MODS) SIMILAR IN APPEARANCE. EVEN THOUGH EACH PAGE IS DIFFERENT, THEY ARE ALL DONE IN A CERTAIN STYLE OR "LOOK". (THE SAME IS TRUE FOR THE OTHER KINDS OF MODS.)

FOR EXAMPLE:





WORD GUIDE

DUPLICATE - REPRODUCE, COPY.

INFORMATION

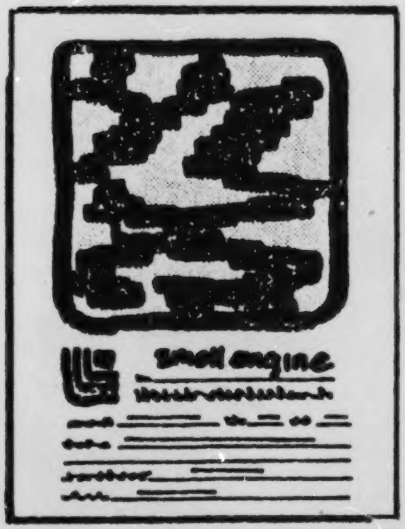
IT IS IMPORTANT FOR A PASTE-UP PERSON O UNDERSTAND AND BE ABLE TO DETERMINE ND DUPLICATE A "LOOK". MANY TIMES A CLIENT ILL ALREADY HAVE A PRINTED PIECE THAT HE/ HE LIKES AND WANTS REPEATED, EVEN THOUGH HERE IS A DIFFERENT AMOUNT OF BODY COPY ND MORE PICTURES THIS TIME. THE CLIENT ANTS YOU TO MATCH THE "LOOK". PART OF OING A PROFESSIONAL PASTE-UP JOB IS GIVING HE CLIENT WHAT HE/SHE WANTS. IF THE CLIENT S HAPPY WITH YOUR WORK, YOU WILL BE UCCESSFUL.

WORD GUIDE

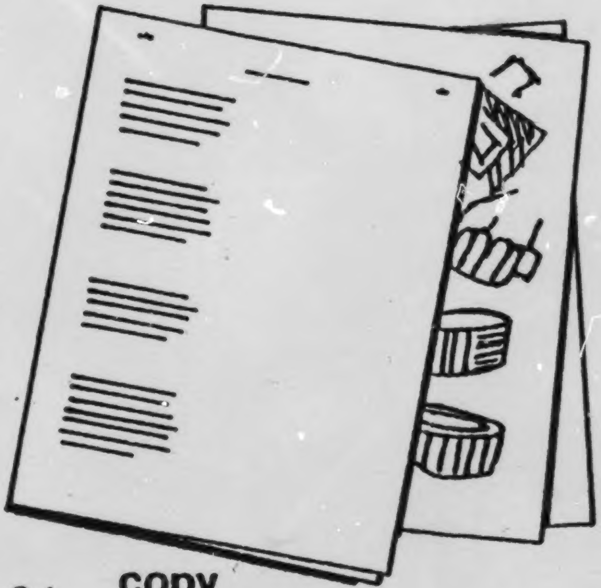
COPY - ARTWORK, ETC.

JOB STEPS

1. STUDY THE SAMPLE MODULE FOR STYLE AND CHECK TO SEE IF YOUR PASTE-UP MODULE COPY WILL WORK IN THAT STYLE. MEASURE THE MARGINS AND, IF YOUR ILLUSTRATIONS ARE TOO BIG, ASK YOUR INSTRUCTOR TO SHOW YOU HOW TO GET SMALLER SIZE COPIES MADE.



sample mod



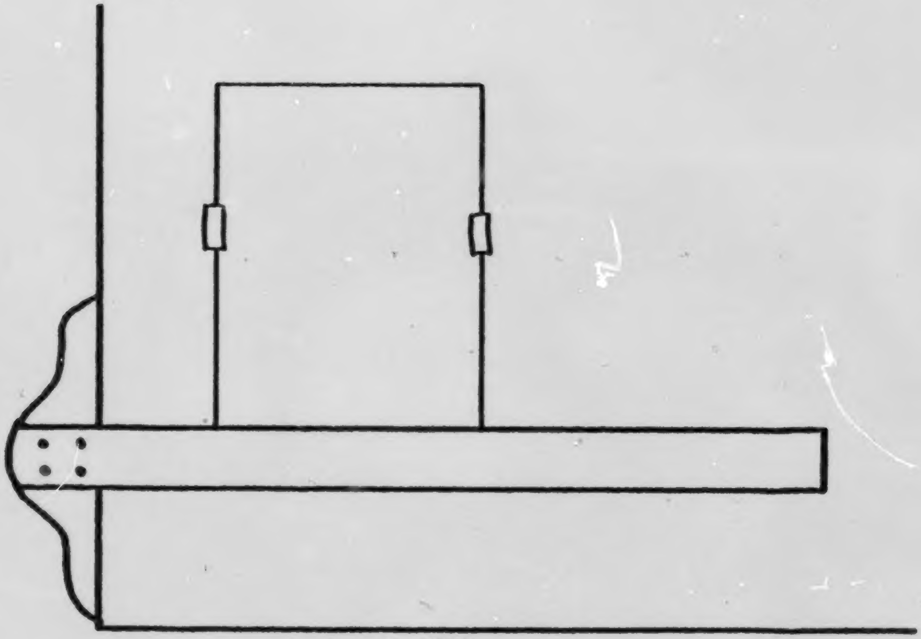
copy

JOB STEPS

2. COAT THE BACK OF THE COPY WITH ADHESIVE.

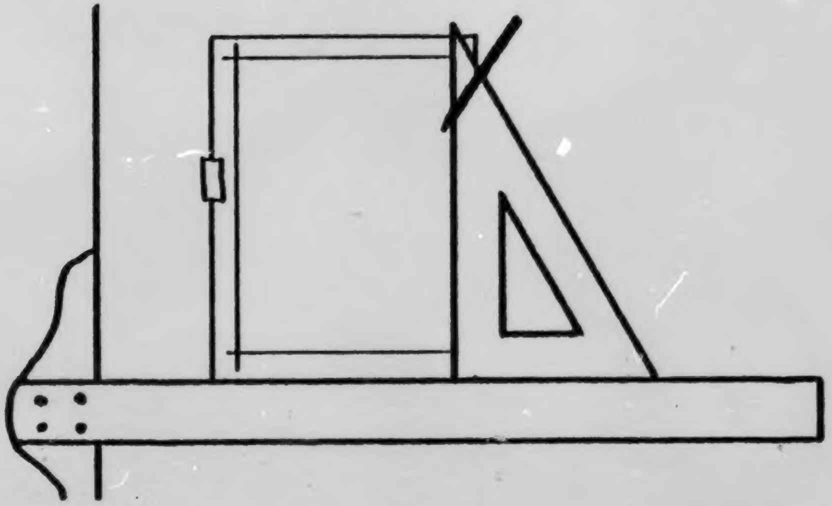
   NOTE: YOU MAY USE RUBBER CEMENT OR WAX WITH THIS PROJECT.

3. LINE UP AND TAPE A SHEET OF 8½" X 11" #32 LEDGER TO YOUR TABLE.



JOB STEPS

4. USING YOUR T-SQUARE AND TRIANGLE, DRAW THE MARGINS WITH BLUE PENCIL.

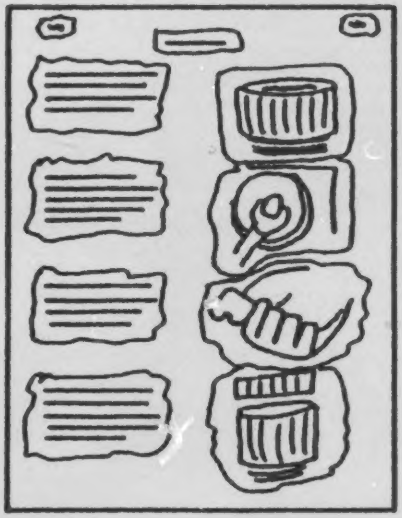


5. START WITH THE FIRST PAGE AND READ THE MANUSCRIPT. MATCH THE ILLUSTRATIONS WITH THE PROPER TYPED COPY.

JOB STEPS

6. CUT OUT THOSE UNITS NEEDED FOR THE FIRST PASTE-UP PAGE.

7. LOOSELY, PASTE DOWN THE UNITS, LINING THEM UP BY EYE SO EVERYTHING LOOKS SQUARE. KEEP EVERYTHING WITHIN THE MARGINS. ⟶



NOTE: DO NOT CROWD OR OVER FILL THE PAGE. (FOLLOW THE SAMPLE MOD)

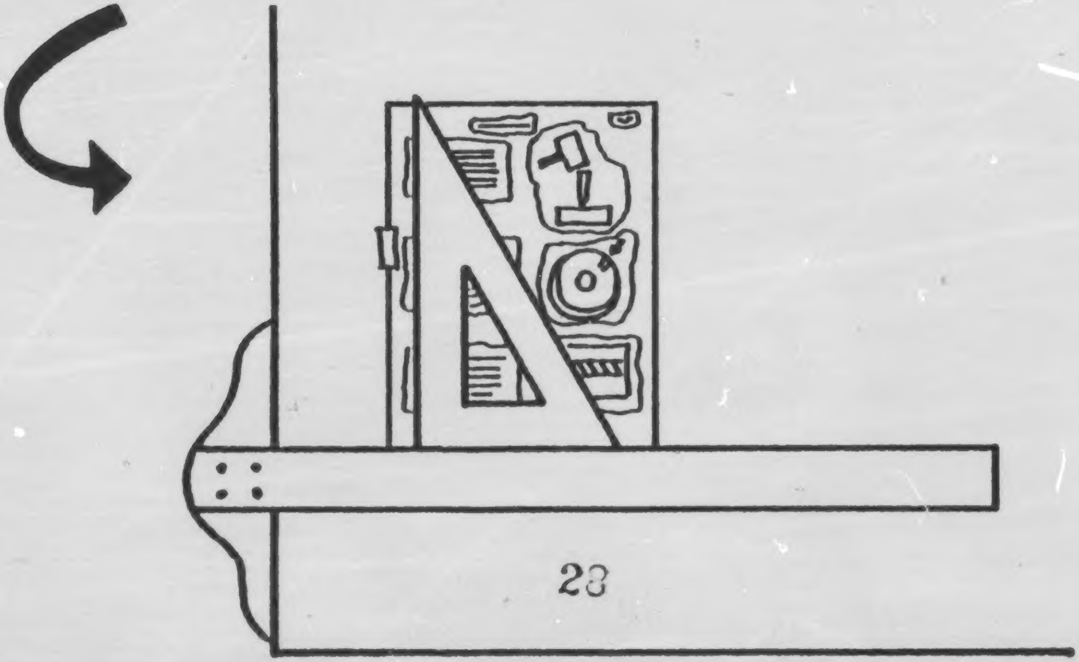
DO NOT BURNISH YET!

8. REPEAT JOB STEPS #3 - 7 FOR ALL THE REMAINING PAGES OF YOUR MOD.

JOB STEPS

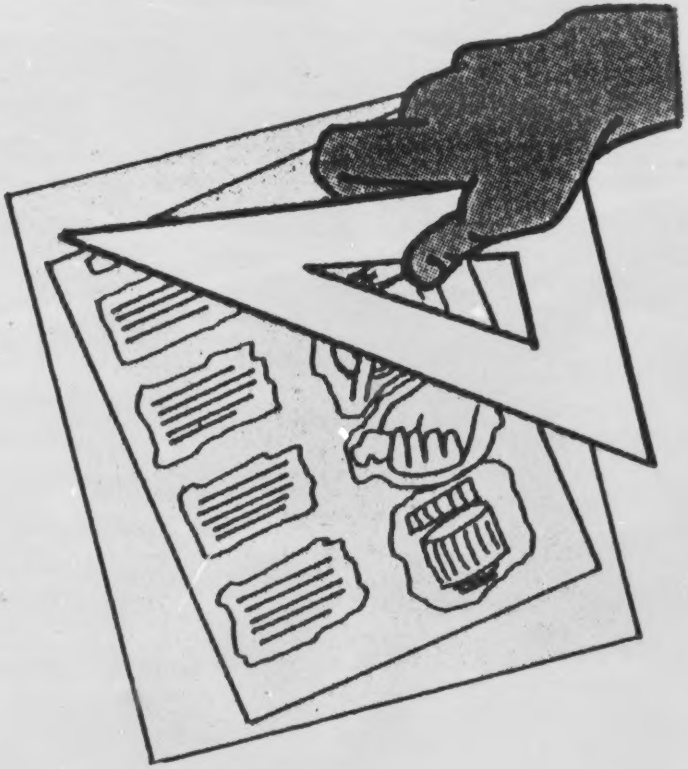
9. SHOW THESE ROUGH PASTE-UPS TO YOUR INSTRUCTOR. NOTE ANY CHANGES HE/SHE MAY SUGGEST.

10. THEN, ONE PAGE AT A TIME, STARTING WITH THE FIRST PAGE, LINE UP AND TAPE DOWN EACH PAGE. CHECK FOR SQUARENESS WITH YOUR T-SQUARE AND TRIANGLE. CORRECT ANY ERRORS.



JOB STEPS

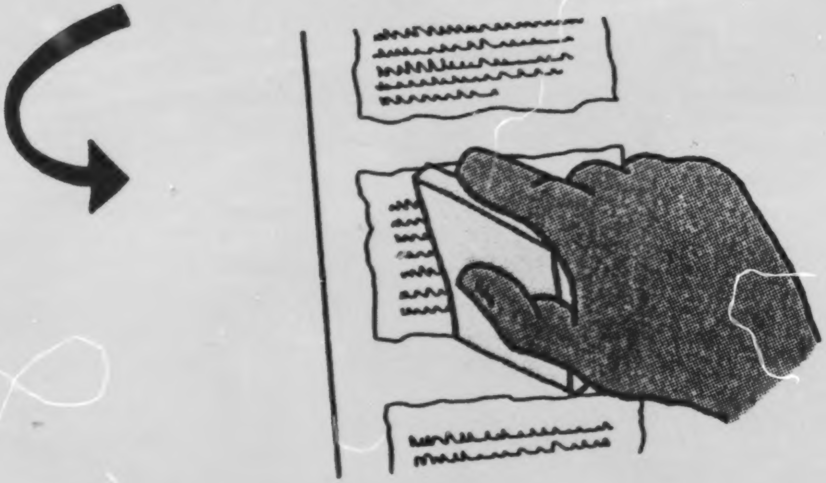
11. WHEN EVERYTHING IS CORRECTLY POSITIONED, BURNISH, USING A PIECE OF SCRAP PAPER TO PROTECT YOUR PASTE-UP.



TURN PAGE →

JOB STEPS

12. CLEAN UP ANY EXCESS ADHESIVE AND/OR SMUDGES, ETC.



13. SHOW THE COMPLETED PASTE-UP PROJECT TO YOUR INSTRUCTOR. IF NECESSARY, MAKE ANY CORRECTIONS HE/SHE MAY INDICATE BEFORE YOU GO ON TO THE NEXT MOD.

graphics

unit: PREPARING COPY FOR REPRODUCTION

capital area career center

module: 1401 09 004 7 **date:** 7/77 **level:**

skill title: LEARNING TO USE WHITE SPACE IN PASTE-UP

developed & written by: NANCY LOMBARDI

visuals by: NANCY LOMBARDI

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

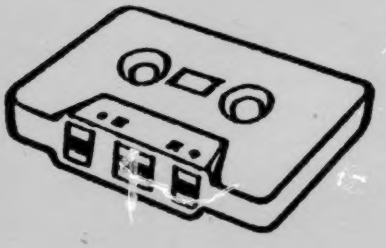
HOW TO USE WHITE SPACE IN PASTE-UP.

IN ORDER TO DO THIS YOU WILL NEED:

- T-SQUARE
- TRIANGLE
- RULER
- SCISSORS
- ADHESIVE
- BURNISHER
- MASKING TAPE
- 8 1/2" X 11" #32 LEDGER
- LIGHT BLUE PENCIL
- MAGAZINE OR NEWSPAPER
- GRAPHIC MODS 1401 07 004
  - 1401 07 005
  - 1401 07 006
  - 1401 07 009

WE WILL KNOW YOU CAN DO IT WHEN:

YOUR FINAL PASTE-UP IS NEAT, CLEAN, AND ACCURATE WITHIN THE SPECIFIED SIZE AND IS LAID OUT IN A PLEASING MANNER.



A TAPE OF THIS MODULE IS AVAILABLE

INFORMATION

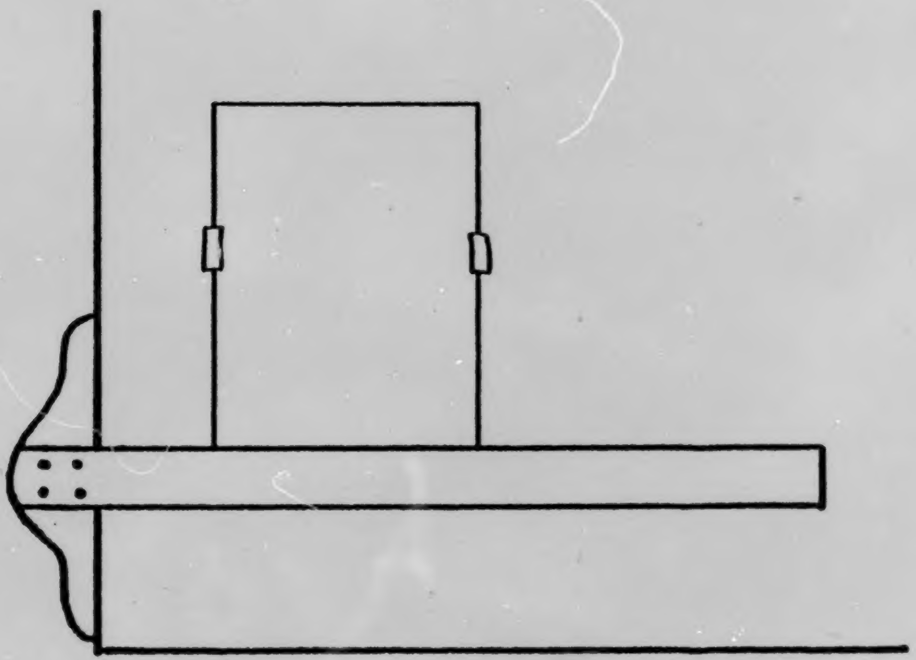
SOME PRINTING AND GRAPHIC ARTS SHOPS ARE TOO SMALL TO BE ABLE TO EMPLOY A LAYOUT AND DESIGN ARTIST, SO THE COMPOSITORS OR SUPERVISOR WILL LAYOUT, DESIGN, AND ARRANGE THE PRINTING. BUT, BECAUSE THESE PEOPLE USUALLY GO DIRECTLY TO FINISHED TYPE AND ARTWORK, OFTEN IT IS LEFT TO THE PASTE-UP PERSON TO DO THE FINAL LAYOUT. HE/SHE IS THE PERSON WHO GETS ALL THE FINAL ELEMENTS: TYPE RPOOFS, PHOTOS, ARTWORK, ETC. SOMETIMES, THE PASTE-UP PERSON IS GIVEN A LAYOUT TO FOLLOW. BUT, MANY TIMES, HE/SHE MUST TAKE ALL THESE ELEMENTS (COPY FOR REPRODUCTION) TO ARRANGE THEM IN A PLEASING MANNER, WHILE DOING THE FINAL PASTE-UP.

INFORMATION

READ "GRAPHIC ARTS LAYOUT AND DESIGN" MODS 1401 07 004, 1401 07 005, 1401 07 006, AND 1401 07 009. YOU SHOULD BE FAMILIAR WITH THESE DESIGN PRINCIPLES BEFORE GOING ON TO THE JOB STEPS PART OF THIS MOD.

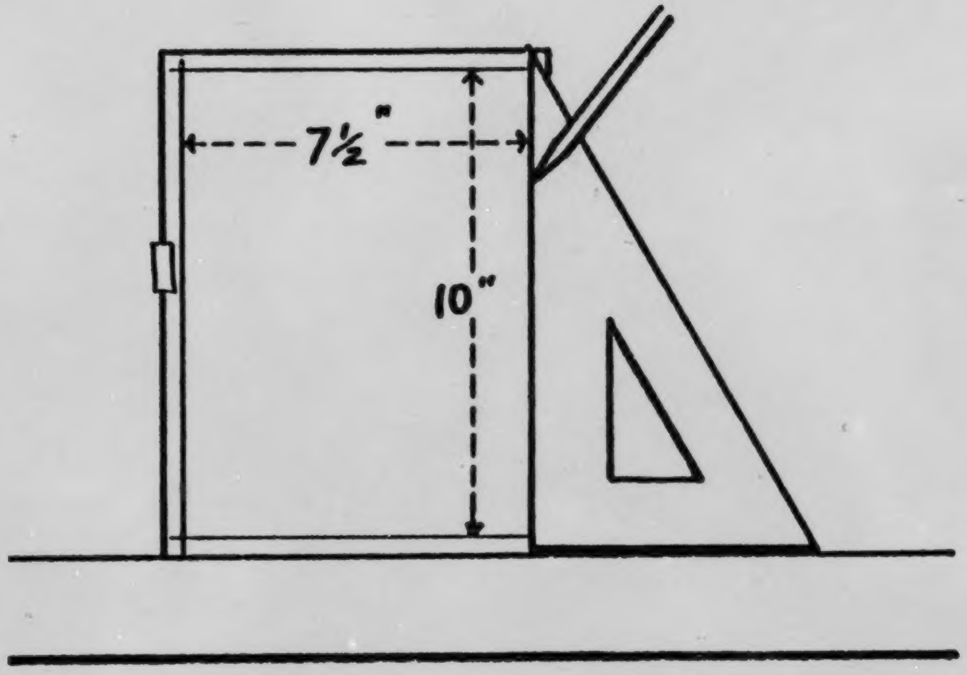
JOB STEPS

1. LINE UP A SHEET OF 8½" X 11" #32 LEDGER WITH YOUR T-SQUARE AND TAPE IT DOWN TO THE TABLE.



JOB STEPS

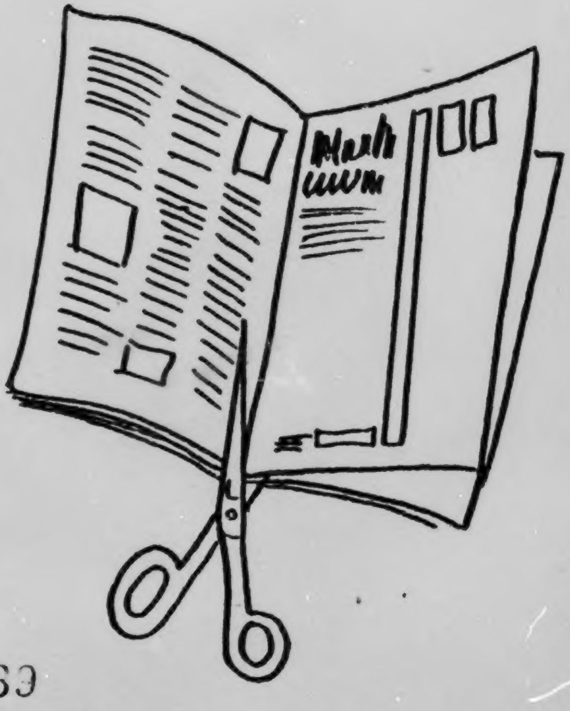
2. MEASURE 1/2" IN FROM THE LEFT, RIGHT, TOP, AND BOTTOM EDGES OF THE SHEET. USING YOUR T-SQUARE AND TRIANGLE, DRAW THESE MARGINS WITH A BLUE PENCIL. THESE LINES SHOULD NOW ENCLOSE A 7 1/2" X 10" AREA.



JOB STEPS

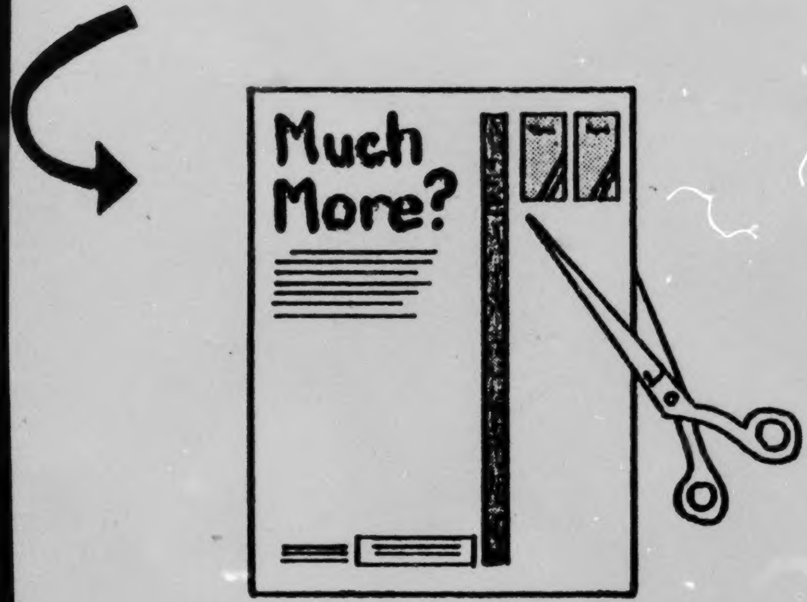
3. KEEPING IN MIND WHAT YOU HAVE LEARNED FROM READING THE LAYOUT AND DESIGN MODS, LOOK THROUGH YOUR NEWSPAPER OR MAGAZINE FOR AN ADVERTISEMENT WHOSE ELEMENTS WOULD WORK WELL WITHIN THE 7 1/2" X 10" AREA. REMEMBER - YOU WILL HAVE TO REARRANGE THE ELEMENTS WHEN YOU DO YOUR PASTE-UP.

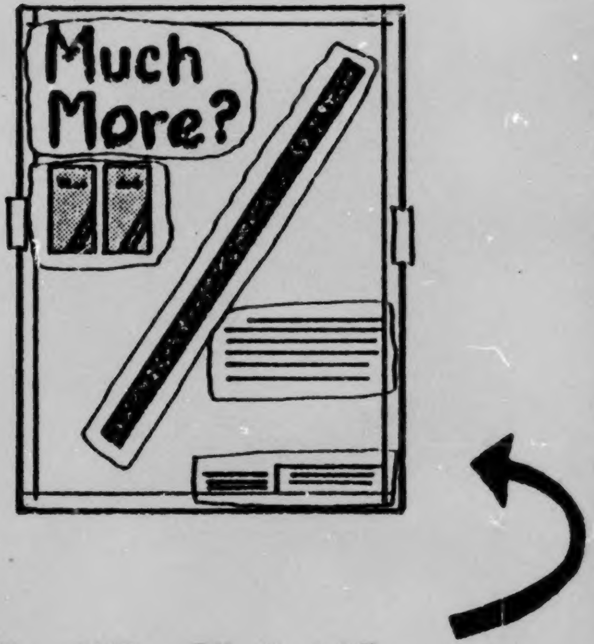
4. CUT OUT THE AD AND APPLY ADHESIVE TO THE BACK. YOU MAY USE RUBBER CEMENT OR WAX FOR THIS PROJECT.



JOB STEPS

5. CUT OUT THE VARIOUS ELEMENTS (HEADING, BODY, TYPE, ETC.)





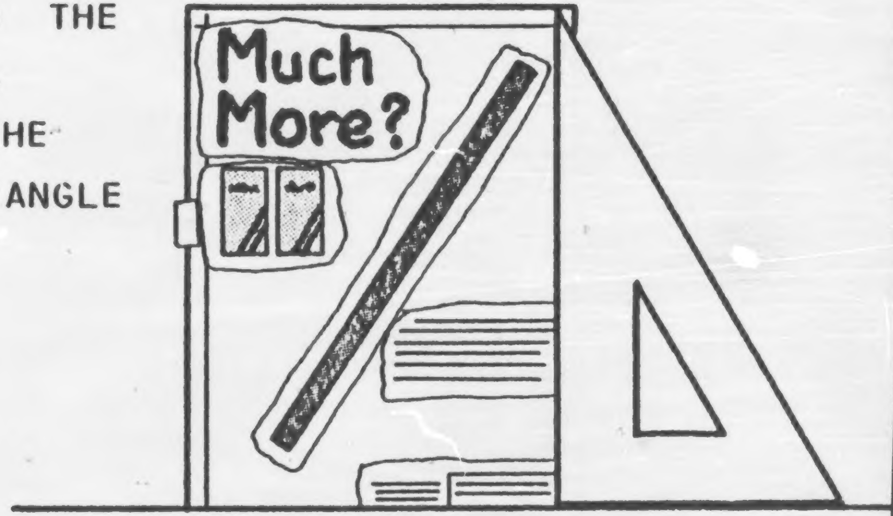
6. POSITION THE ELEMENTS WITHIN THE 7" X 10" AREA IN A PLEASING ARRANGEMENT. (IF YOU ARE USING 2-COAT CEMENT, PUT A PIECE OF CLEAN TRACING PAPER BETWEEN THE CEMENTED SURFACES WHILE YOU WORK ON THIS STEP.)

JOB STEPS

7. WHEN YOU FEEL YOU HAVE FOUND A PLEASING ARRANGEMENT OF THE ELEMENTS, LOOSELY PASTE THEM DOWN. DO NOT BURNISH! LINE UP BY EYE.

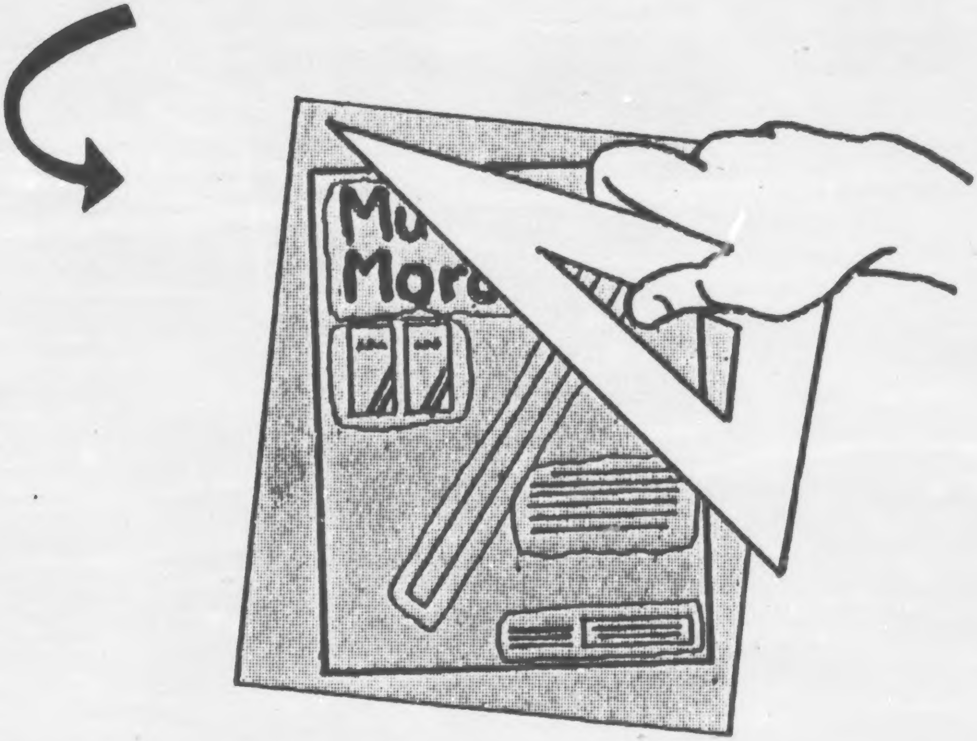
8. SHOW THIS ROUGH PASTE-UP TO YOUR INSTRUCTOR. NOTE ANY CHANGES HE/SHE MAY SUGGEST.

9. USING YOUR T-SQUARE, RELINE UP AND TAPE YOUR PASTE-UP TO THE TABLE. CHECK FOR SQUARENESS WITH THE T-SQUARE AND TRIANGLE AND CORRECT ANY ERRORS.



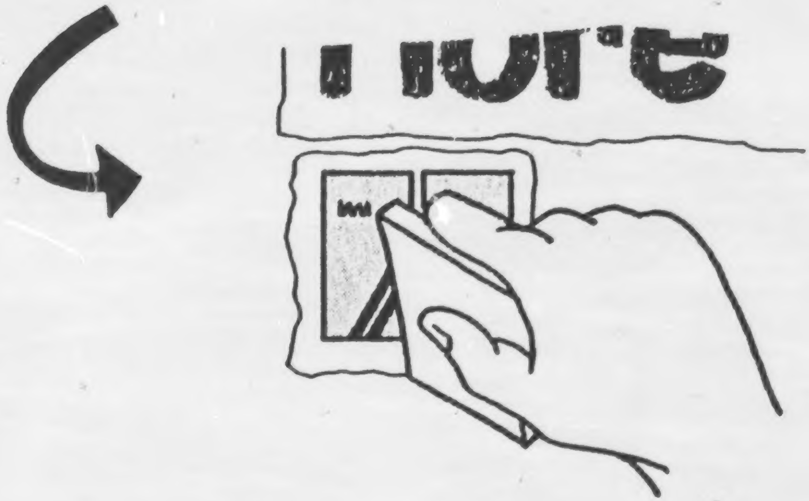
JOB STEPS

10. WHEN EVERYTHING IS CORRECTLY POSITIONED, BURNISH, USING A PIECE OF SCRAP PAPER TO PROTECT YOUR PASTE-UP.



JOB STEPS

11. CLEAN UP ANY EXCESS ADHESIVE AND/OR SMUDGES, ETC.



12. SHOW THE COMPLETED PASTE-UP PROJECT TO YOUR INSTRUCTOR. IF NECESSARY, MAKE ANY CORRECTIONS HE/SHE MAY INDICATE BEFORE YOU GO ON TO THE NEXT MOD.

graphics

unit: PREPARING COPY FOR REPRODUCTION

capital area career center

module: 1401 09 007 7 **date:** 7/77 **level:** IV

skill title: USING THE RULING PEN

developed & written by: NANCY LOMBARDI

visuals by: NANCY LOMBARDI

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

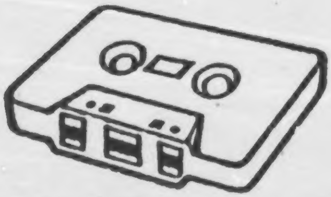
HOW TO USE A RULING PEN.

IN ORDER TO DO THIS YOU WILL NEED:

RULING PEN
T-SQUARE
TRIANGLE
RULER
4H PENCIL
BLACK INK
MASKING TAPE
8½" X 11" #32 LEDGER

WE WILL KNOW YOU CAN DO IT WHEN:

YOU CAN RULE LINES OF DIFFERENT THICKNESS AND SPECIFIC LENGTHS CLEANLY AND ACCURATELY.



A TAPE OF THIS MODULE IS AVAILABLE.

WORD GUIDE

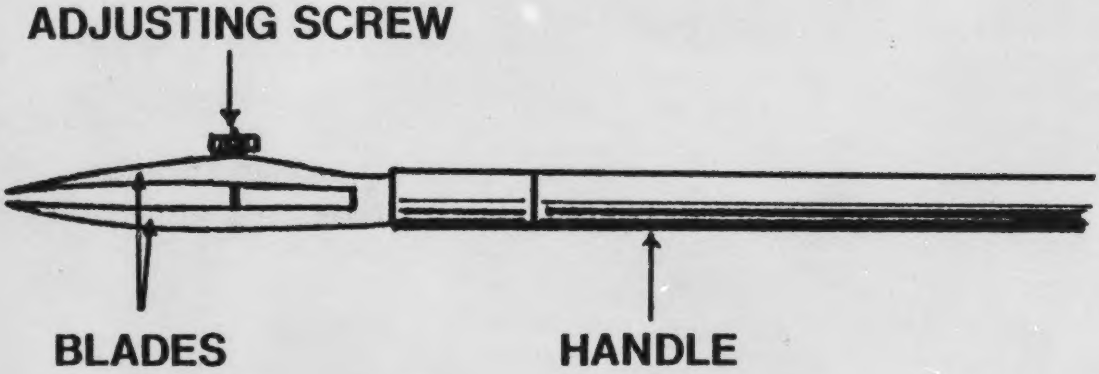
PRECISION - EXACTNESS

INFORMATION

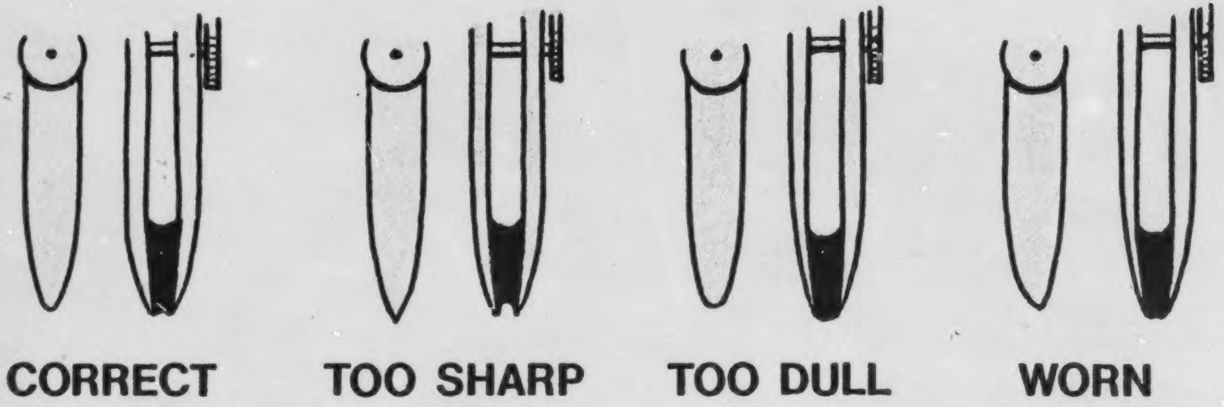
A RULING PEN IS USED FOR INKING STRAIGHT LINES AND NON-CIRCULAR CURVES. IT IS ALWAYS USED IN CONNECTION WITH A GUIDING EDGE, SUCH AS A STRAIGHT EDGE TRIANGLE OR FRENCH CURVE. A CIRCULAR CURVE (CIRCLE) MAY BE INKED WITH A COMPASS THAT HAS A RULING POINT BUT NOT WITH RULING PEN ITSELF. THERE ARE SEVERAL TYPES OF RULING PENS:

THE RULING PEN IS A PRECISION INSTRUMENT AND MUST BE OR GOOD QUALITY. THE LESS EXPENSIVE PENS ARE NOT VERY USEFUL BECAUSE THEY WEAR DOWN QUICKLY AND DO NOT RULE CLEAN LINES. THE MOST IMPORTANT PART OF A RULING PEN IS THE POINT, WHICH CONSISTS OF TWO BLADES AND AN ADJUSTING SCREW.

INFORMATION


ADJUSTING SCREW
BLADES
HANDLE

THE BLADES MUST BE PROPERLY SHARPENED, OR SHAPED.


CORRECT
TOO SHARP
TOO DULL
WORN

INFORMATION

A GOOD QUALITY RULING PEN IS USUALLY CORRECTLY SHARPENED WHEN PURCHASED. CHEAPER ONES MUST OFTEN BE PROPERLY SHARPENED BEFORE USE. IF NECESSARY, ASK YOUR INSTRUCTOR HOW TO SHARPEN YOUR PEN.

AS WITH ALL QUALITY TOOLS, PROPER MAINTENANCE AND HANDLING IS IMPORTANT FOR CONTINUED EFFICIENT USE. NEVER ALLOW INK OR PAINT TO DRY OR FORM A CRUST AROUND THE POINT OF A RULING PEN. IF THIS HAPPENS, CLEAN IT WITH AMMONIA OR WITH WATER. NEVER SCRAPE OFF DRIED INK OR PAINT WITH A RAZOR BLADE OR OTHER METAL OBJECT. THIS CAN PERMANENTLY DAMAGE THE PEN AND MAKE IT USELESS.

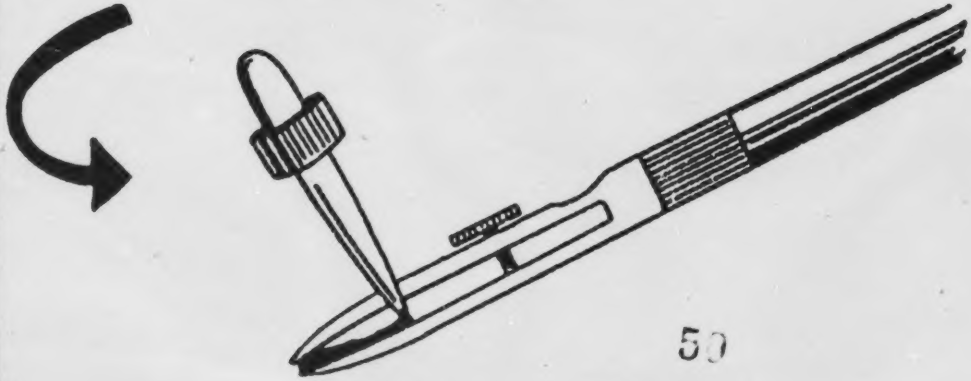
DRY INK ON THE BLADES CAUSES STOPPAGE OF INK FLOW AND BROKEN LINES. CLEANING THE PEN FREQUENTLY WITH WATER AND A RAG WHILE YOU WORK WILL PREVENT THIS. A RULING PEN SHOULD ALWAYS BE KEPT CLEAN WHEN NOT IN USE.

INFORMATION

REMEMBER: A GREAT DEAL OF PATIENCE AND PRACTICE IS NECESSARY TO LEARN HOW TO USE A RULING PEN ACCURATELY. DO NOT BE DISCOURAGED. IT TAKES TIME.

HOW TO INK LINES WITH A RULING PEN:

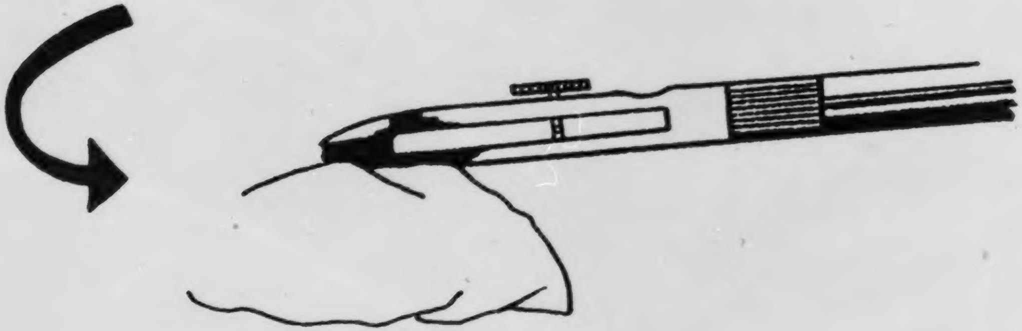
1. FILL THE PEN, USING THE DROPPER IN THE INK BOTTLE'S CAP. PLACE THE POINT OF THE DROPPER ABOUT 1/2" UP FROM THE TIP OF THE PEN POINT AND SQUEEZE GENTLY. BE CAREFUL NOT TO OVERLOAD THE PEN. NEVER DIP YOUR PEN INTO THE INK.



INFORMATION

CAUTION: ALWAYS FILL THE PEN OFF TO ONE SIDE, AWAY FORM YOUR WORK. DO NOT SHAKE OR WAVE THE PEN AROUND AFTER FILLING IT.

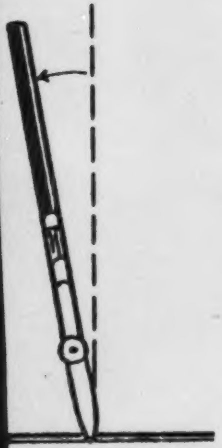
2. MAKE SURE THE OUTSIDE OF THE BLADES ARE CLEAN BEFORE RULING. IF NOT CLEANED OFF, THE INK WILL ACT AS A PATH TO YOUR RULING GUIDE, CAUSING SMEARS AND BLOTCHES.



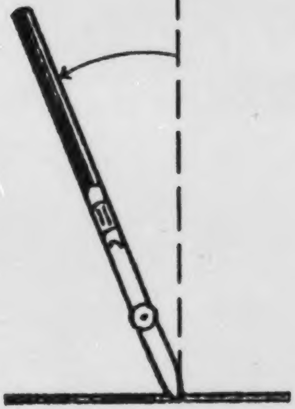
3. HOLD PEN BETWEEN THUMB AND FIRST TWO FINGERS, ADJUSTMENT SCREW FACING OUTWARD.

INFORMATION

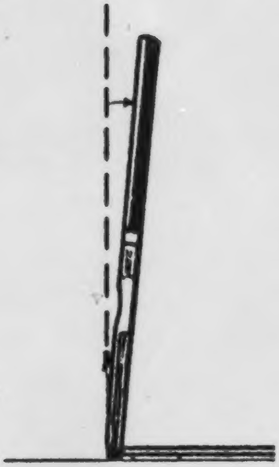
4. TILT PEN SLIGHTLY IN THE DIRECTION OF THE STROKE (RIGHT HANDED: TILT TO THE RIGHT - LEFT HANDED: TILT TO THE LEFT) BUT KEEP THE PEN PERPENDICULAR TO THE PAPER.



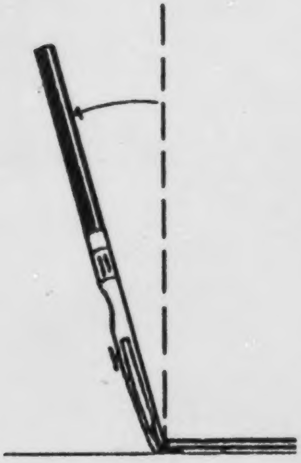
Right way



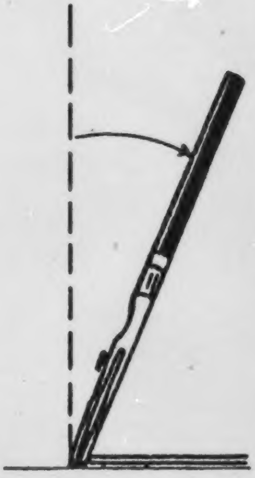
Too much tilt



Right way



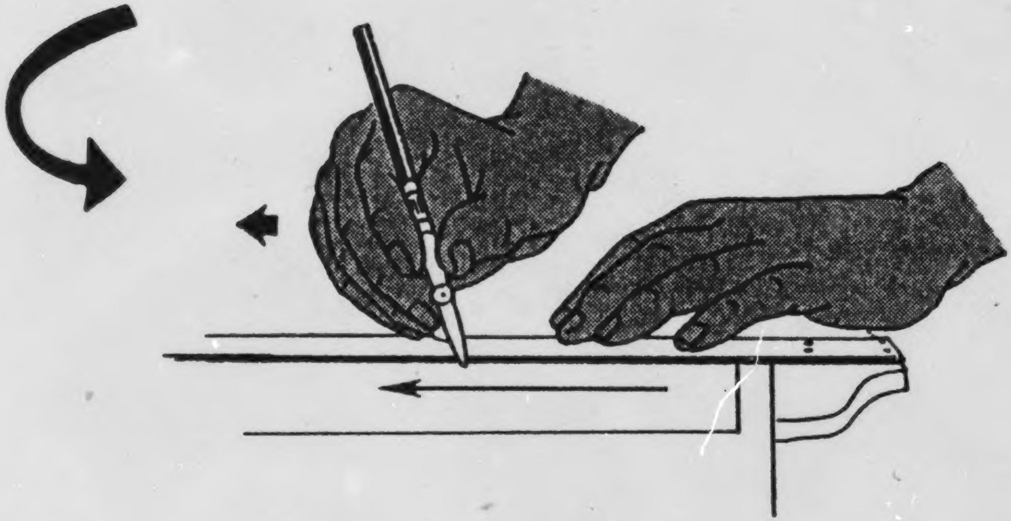
Too far forward



Too far back

INFORMATION

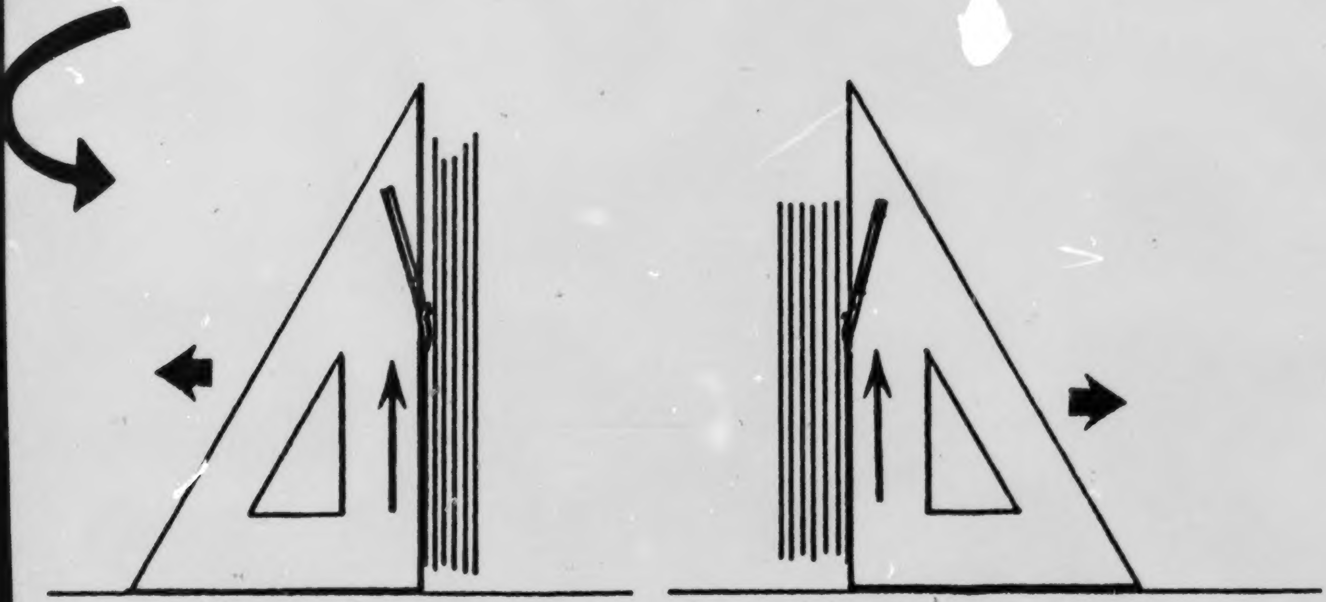
5. PLACE THE POINT ON THE PAPER AND, HOLDING IT CORRECTLY, SLIDE THE PEN ALONG THE EDGE OF THE GUIDE. DO NOT PRESS. MOVE YOUR ARM AND SHOULDER AS A SINGLE UNIT. DO NOT BEND OR TWIST YOUR WRIST OR ELBOW WHEN INKING.



6. THE DIRECTION OF THE STROKE SHOULD ALWAYS BE AWAY FORM YOUR BODY.

INFORMATION

7. VERTICAL LINES SHOULD BE RULED ALONG LEFT SIDE OF TRIANGLE. (LEFT HANDED: RIGHT SIDE) TURN YOUR BODY SO THAT YOUR SHOULDERS ARE PARALLEL TO THE LINE YOU ARE INKING. REMEMBER: THE STROKE IS AWAY FROM YOU.

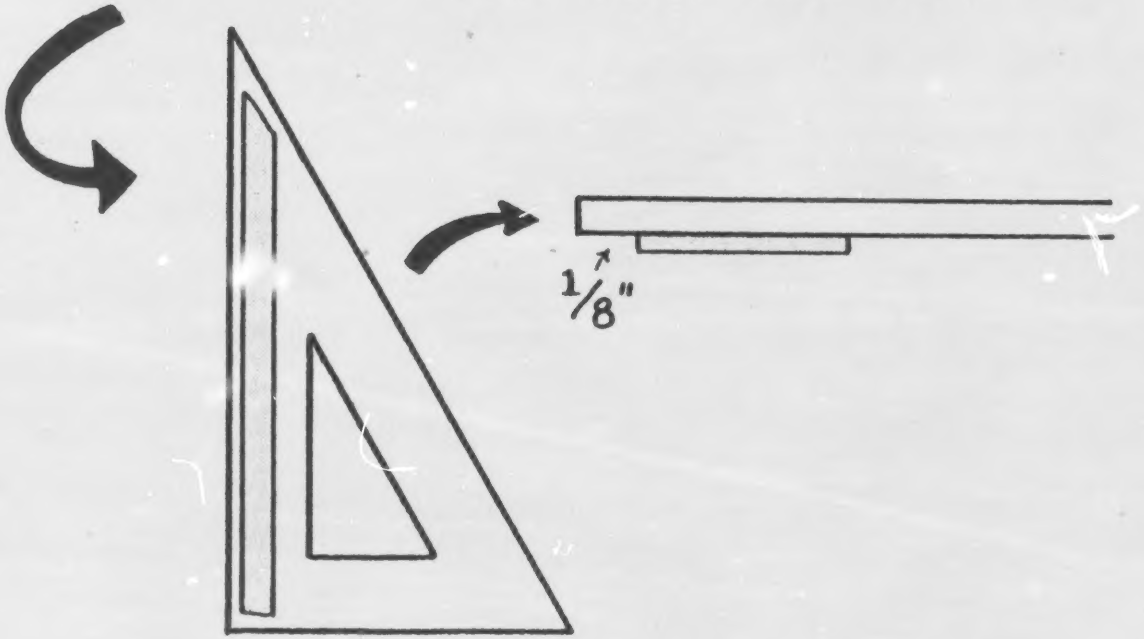


Left-Handed Method → Right-Handed Method

INFORMATION

8. TO PREVENT THE INK FROM RUNNING UNDER YOUR GUIDE, TAPE SEVERAL LAYERS (2 OR 3) OF MASKING TAPE TO ITS UNDERSIDE. THIS LIFTS THE GUIDE FROM THE BOARD.

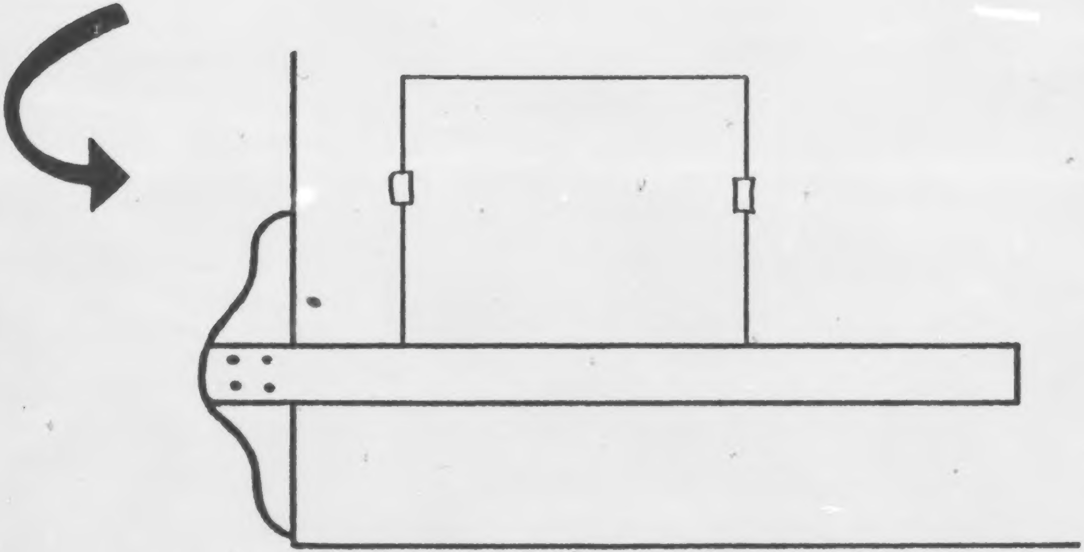
NOTE: DO NOT PUT THE TAPE TOO CLOSE TO THE EDGE. (1/8" AWAY OK.)



JOB STEPS

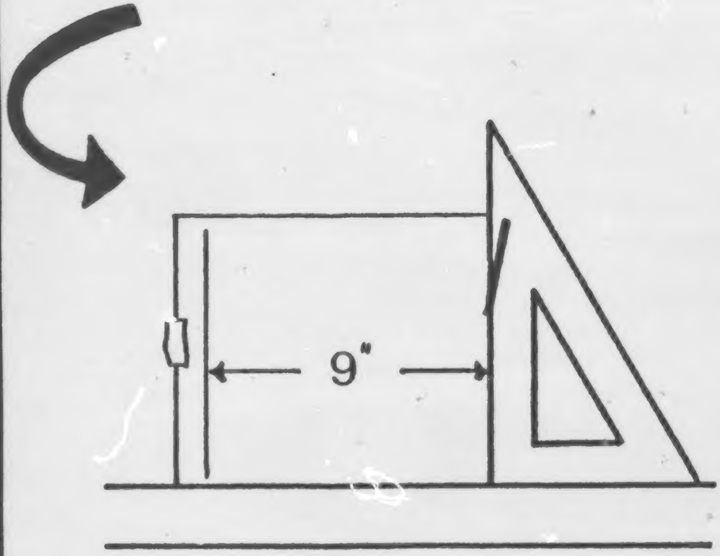
1. PRACTICE USING PEN UNTIL YOU CAN INK GOOD, CLEAN LINES OR DIFFERENT THICKNESSES (THE THINNIST TO HEAVIEST POSSIBLE). WHEN YOU FEEL CONFIDENT YOU CAN DO THIS, BOTH HORIZONTALLY AND VERTICALLY, GO TO STEP 2. IF YOU HAVE TROUBLE, ASK YOUR INSTRUCTOR FOR HELP.

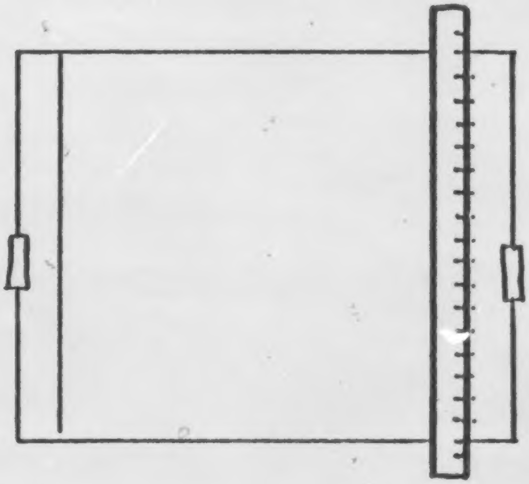
2. LINE UP AND TAPE DOWN A SHEET OF #32 LEDGER ALONG 11".



JOB STEPS

3. USING T-SQUARE AND TRIANGLE, DRAW TWO VERTICAL LINES IN 4H PENCIL, 9" APART.

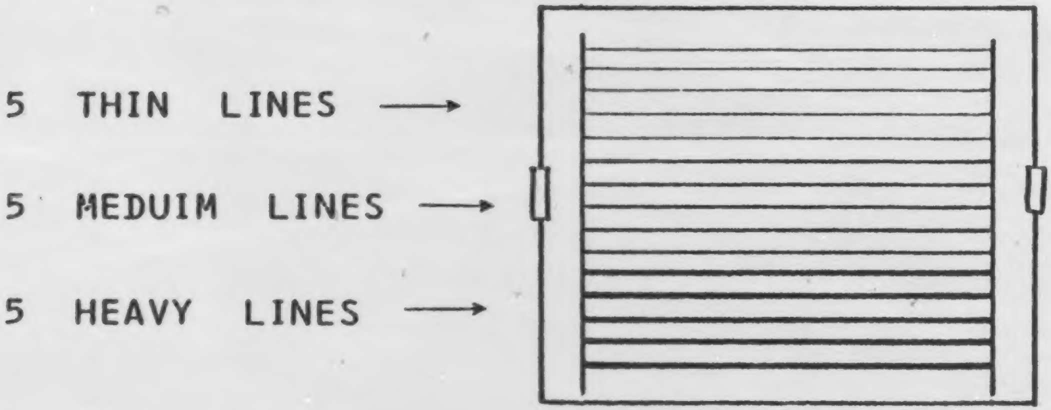




4. DIVIDE THE 8 1/2" HEIGHT INTO 1/2" UNITS.

JOB STEPS

5. STARTING AT THE SECOND MARK DOWN FROM TOP OF SHEET (1" DOWN) WITH YOUR T-SQUARE AS A GUIDE, BEGIN INKING THE FOLLOWING:

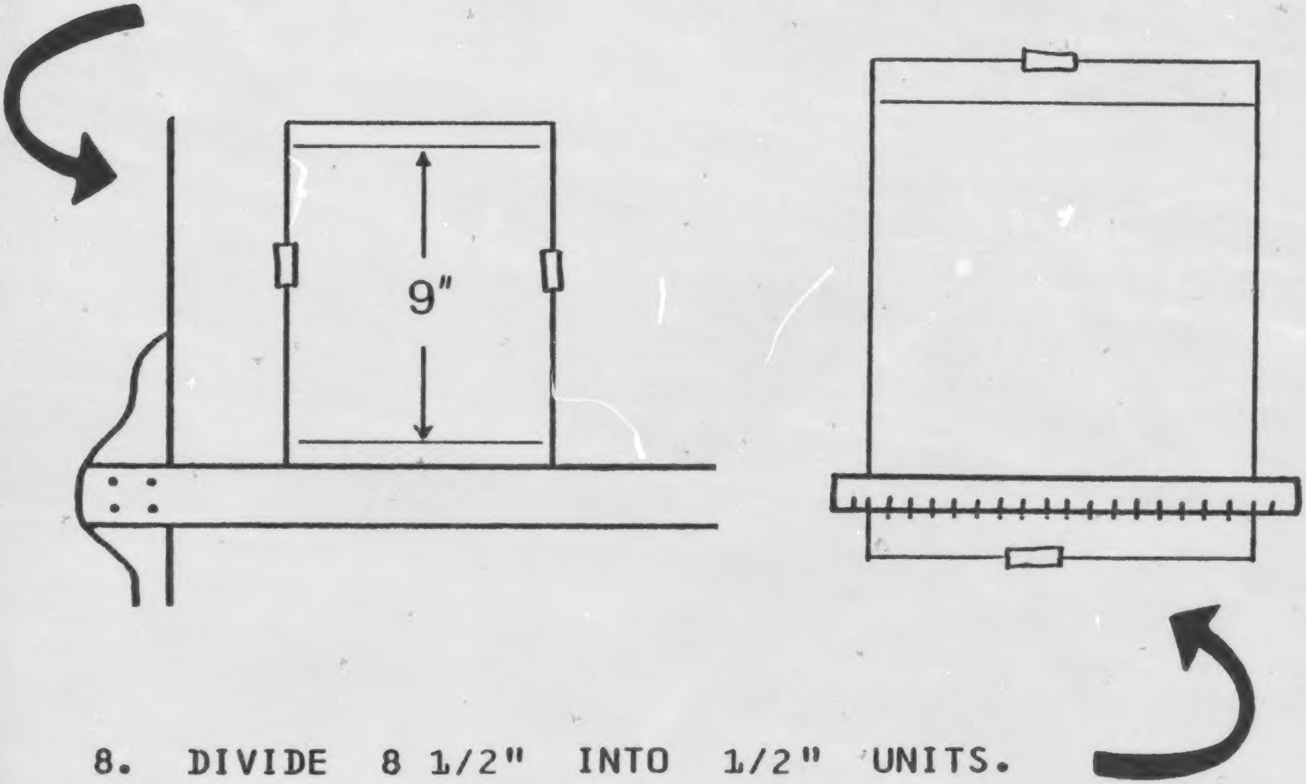


EACH LINE SHOULD START AND STOP AT THE VERTICAL PENCIL LINES (MARGINS) AND BE 1/2 " APART FROM EACH OTHER.

6. WHEN YOU HAVE COMPLETED STEP #5 SATISFACTORALY, WAIT FOR THE INK TO DRY COMPLETLY AND THEN REMOVE THE SHEET. SHOW THIS TO YOUR INSTRUCTOR BEFORE CONTINUING.

JOB STEPS

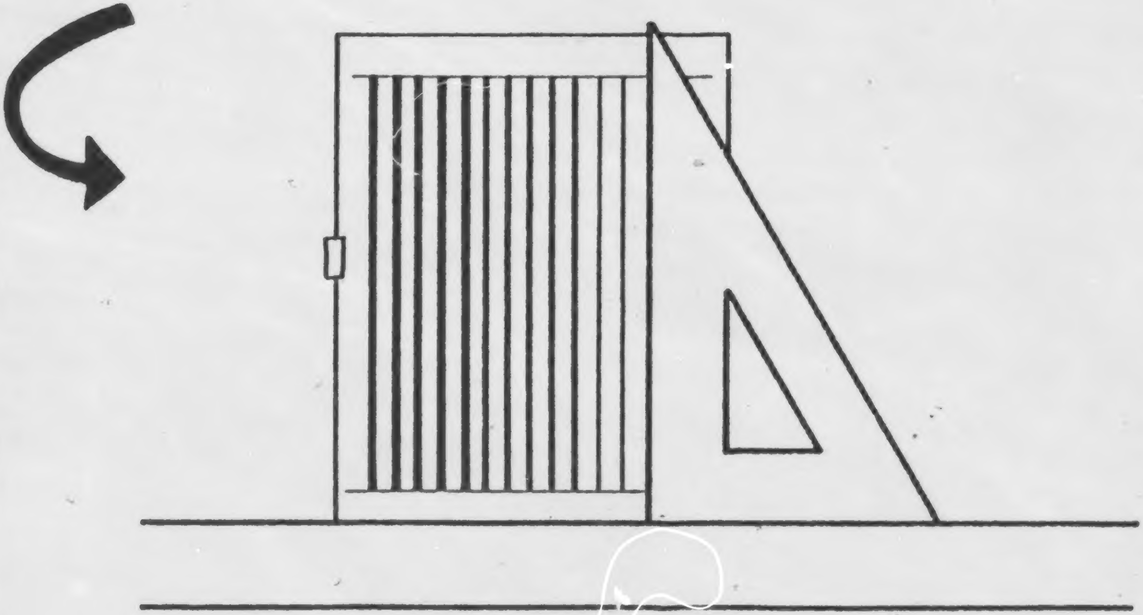
7. LINE UP AND TAPE DOWN LEDGER ALONG 8½". THEN WITH YOUR T-SQUARE, DRAW TWO HORIZONTAL LINES WITH 4H PENCIL, 9" APART.



8. DIVIDE 8 1/2" INTO 1/2" UNITS.

JOB STEPS

9. STARTING TWO UNITS (1") FROM LEFT SIDE OF SHEET, (F RIGHT HANDED, START FROM RIGHT SIDE IF LEFT HANDED) REPEAT STEP #5 BUT NOW INK VERTICAL LINES, WITH YOUR TRIANGLE AS A GUIDE.



10. WHEN YOU HAVE COMPLETED STEP #9 SATISFACTORILY, WAIT FOR INK TO DRY AND SHOW IT TO YOUR INSTRUCTOR.

graphics

unit: PREPARING COPY FOR REPRODUCTION

capital area career center

module: 1401 09 008 7 **date:** 7/77 **level:** IV

skill title: USING A RAPIDOGRAPH RULING PEN

developed & written by: NANCY LOMBARDI

visuals by: NANCY LOMBARDI

WORD GUIDE

TEMPLATE - A PATTERN GUIDE

RAPIDOGRAPH - A BRAND NAME FOR TEMPLATE PEN.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

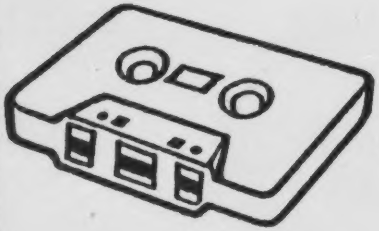
HOW TO USE A RAPIDOGRAPH RULING PEN.

IN ORDER TO DO THIS YOU WILL NEED:

THREE RAPIDOGRAPHS - #00 (THIN), #2 (MEDUIM), #4 (HEAVY)
BLACK TEMPLATE PEN INK
T-SQUARE
TRIANGLE
RULER
#32 LEDGER
4H PENCIL
MASKING TAPE

WE WILL KNOW YOU CAN DO IT WHEN:

YOU COMPLETE THE ASSIGNMENT NEATLY AND ACCURATELY AND YOUR INKED RULES ARE CLEAN AND SHARP.



A TAPE OF THIS MODULE IS AVAILABLE.

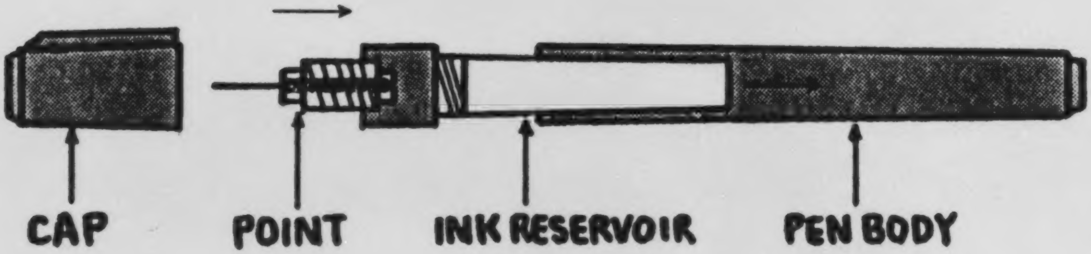
WORD GUIDE

RESERVOIR - SUPPLY OR STORE.

INFORMATION

A TEMPLATE PEN IS COMMONLY CALLED A "RAPIDOGRAPH". HOWEVER, RAPIDOGRAPH IS ONLY ONE OF SEVERAL BRAND NAMES ON THE MARKET. ALL TEMPLATE PENS HAVE TWO THINGS IN COMMON:

1. AN INK RESERVOIR IN THE PEN BODY.
2. A POINT WITH AN INNER NEEDLE OF A SPECIFIC THICKNESS, MEASURED IN MILLIMETERS.



WORD GUIDE

CLOGGED - BLOCKED UP.

INFORMATION

ALTHOUGH TEMPLATE PENS WERE ORIGINALLY DEVELOPED FOR USE WITH "TEMPLATES" OR PATTERN GUIDES, THEY ARE NOW USED ALL THROUGH THE GRAPHICS INDUSTRY (I.E. FREEHAND DRAWING AND LETTERING, RETOUCHING, ETC.). THEY ARE ESPECIALLY GOOD FOR REPETITIVE RULING JOBS REQUIRING CONSISTENT LINE-THICKNESS.

TEMPLATE PENS MUST BE KEPT VERY CLEAN. NEVER ALLOW THEM TO DRY OUT OR CLOG UP AND NEVER LEAVE THE CAP OFF WHEN THE PEN IS NOT IN USE. SOME BRANDS HAVE A SMALL SPONGE IN THE CAP - YOU SHOULD KEEP THIS SPONGE MOIST AT ALL TIMES. ALWAYS READ THE INFORMATION SHEET THAT COMES WITH YOUR PEN FOR MORE DETAILS REGARDING ITS USE AND CARE.

WORD GUIDE

DELICATE - FRAIL, EASILY BROKEN.

INFORMATION

REMEMBER: IF NOT CARED FOR PROPERLY, THE PEN QUICKLY STOPS WORKING AND IS DIFFICULT TO CLEAN. HANDLE THESE PENS WITH CARE BECAUSE THEY ARE DELICATE AND EXPENSIVE.

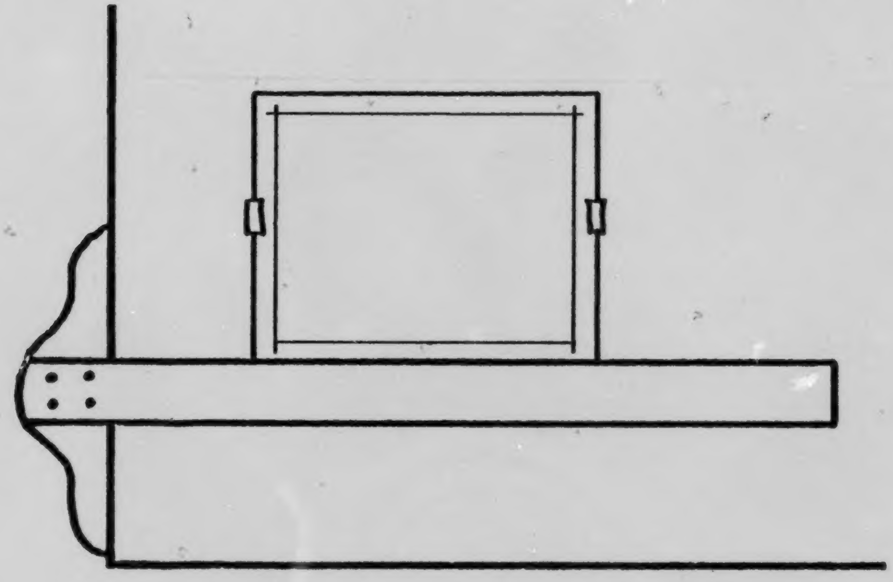
IF A PEN DOES STOP WORKING AND THE RESERVOIR IS FULL, THE POINT IS USUALLY CLOGGED. THERE ARE MANY TECHNICAL PEN-CLEANERS ON THE MARKET. READ THE DIRECTIONS THAT COME WITH THE CLEANER YOU INTEND TO USE.

NOTE: DO NOT TAKE APART THE POINTS THEMSELVES.

JOB STEPS

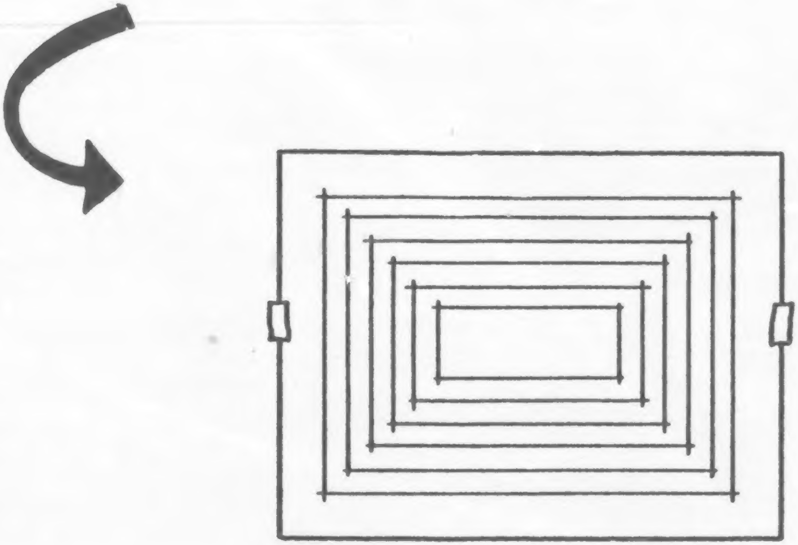
1. LINE UP AND TAPE DOWN A SHEET OF #32 LEDGER ALONG 11".

2. USING T-SQUARE AND TRIANGLE, LIGHTLY DRAW, IN PENCIL, A RECTANGLE 9" X 7".



JOB STEPS

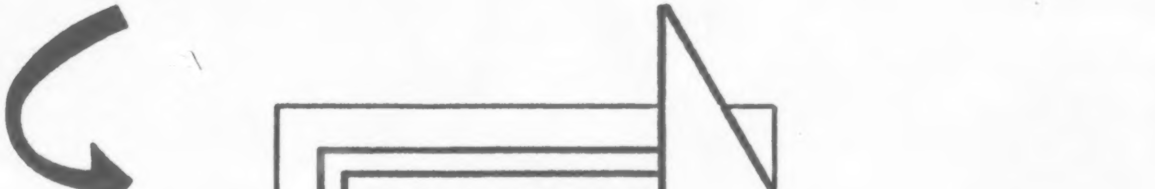
3. WORKING INWARD FROM THE 9" X 7" RECTANGLE, WITH THE T-SQUARE AND TRIANGLE LIGHTLY DRAW, IN PENCIL, FIVE MORE RECTANGLES, EACH SIDE 1/2" FROM THE NEXT.
(SEE ILLUSTRATION)



JOB STEPS

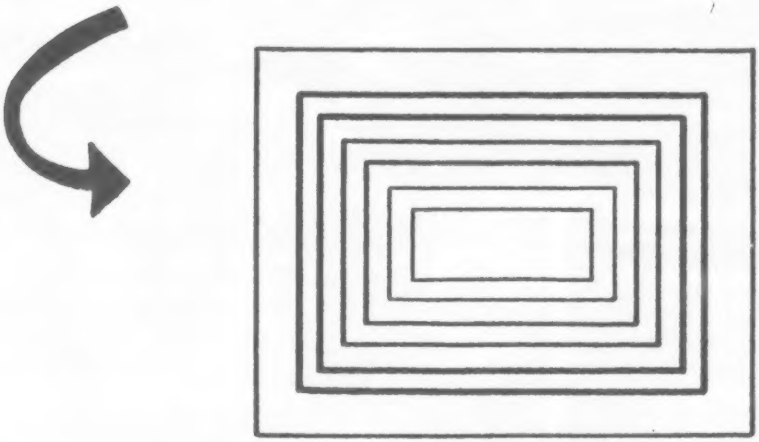
4. WITH YOUR T-SQUARE AND TRIANGLE AS GUIDES, INK THE FIRST TWO RECTANGLES (9" X 7" AND 8" X 6") USING THE #4 (HEAVY) RAPIDOGRAPH. MAKE SURE THE INK OF EACH LINE HAS DRIED BEFORE DOING THE NEXT LINE. BE SURE TO STOP AT THE CORNERS.

5. REPEAT USING THE #2 (MED.) PEN TO INK THE TWO MIDDLE RECTANGLES (7" X 5" AND 6" X 4").



JOB STEPS

6. REPEAT USING THE #00 (THIN) PEN TO INK THE LAST TWO (INNERMOST) RECTANGLES (5" X 3" AND 4" X 2").



7. WHEN YOU ARE FINISHED RULING AND ARE SURE THE INK IS COMPLETELY DRY, ERASE THE PENCIL LINES. THEN SHOW YOUR WORK TO YOUR INSTRUCTOR.

graphics

unit: PREPARING COPY FOR REPRODUCTION

capital area career center

module: 1401 09 009 7 **date:** 7/77 **level:** IV

skill title: PREPARING SIMPLE AND COMPLEX CROSS-RULED FORMS

developed & written by: NANCY LOMBARDI

visuals by: NANCY LOMBARDI

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO PREPARE SIMPLE AND COMPLEX CROSS-RULED FORMS.

IN ORDER TO DO THIS YOU WILL NEED:

THREE RAPIDOGRAPHS - HEAVY, MEDUIM, AND THIN RULE
BLACK INK
T-SQUARE
TRIANGLE
RULER
4H PENCIL
#32 LEDGER
MASKING TAPE

9-

WE WILL KNOW YOU CAN DO IT WHEN:

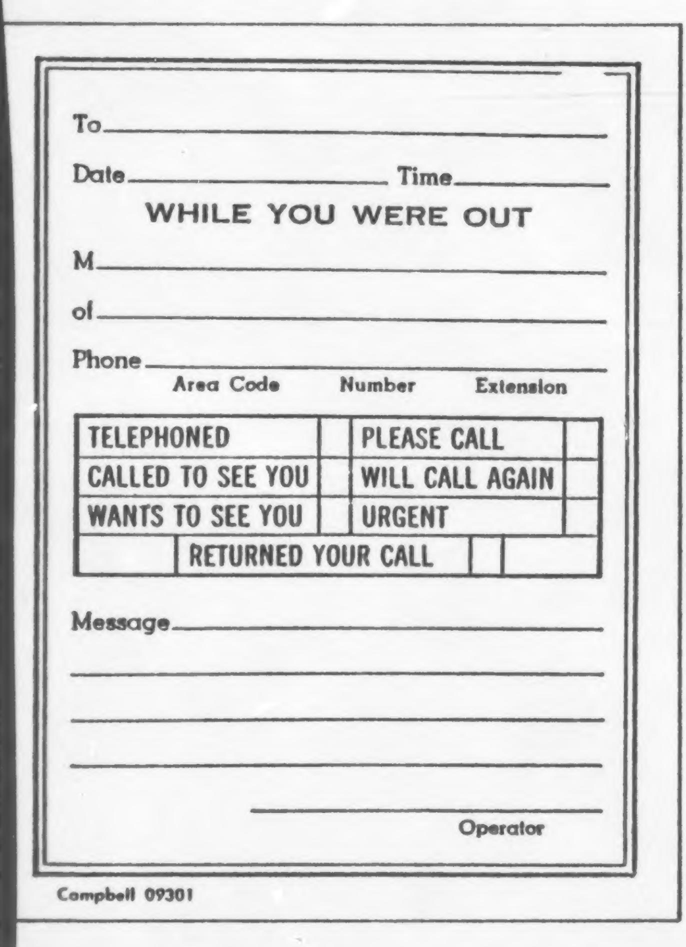
1. YOU COMPLETE THE ASSIGNMENT NEATLY AND ACCURATELY.

2. YOUR INKED LINES AND CORNERS ARE CLEAN, NEAT, AND SHARP.

A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

SIMPLE AND COMPLEX CROSS-RULED FORMS ARE OFTEN USED IN BUSINESS (CHARTS, GRAPHS, ORDER BLANKS, RECEIPTS, ETC.). HERE ARE JUST A FEW EXAMPLES:



To____________________

Date____________ Time__________

WHILE YOU WERE OUT

M____________________

of____________________

Phone____________________

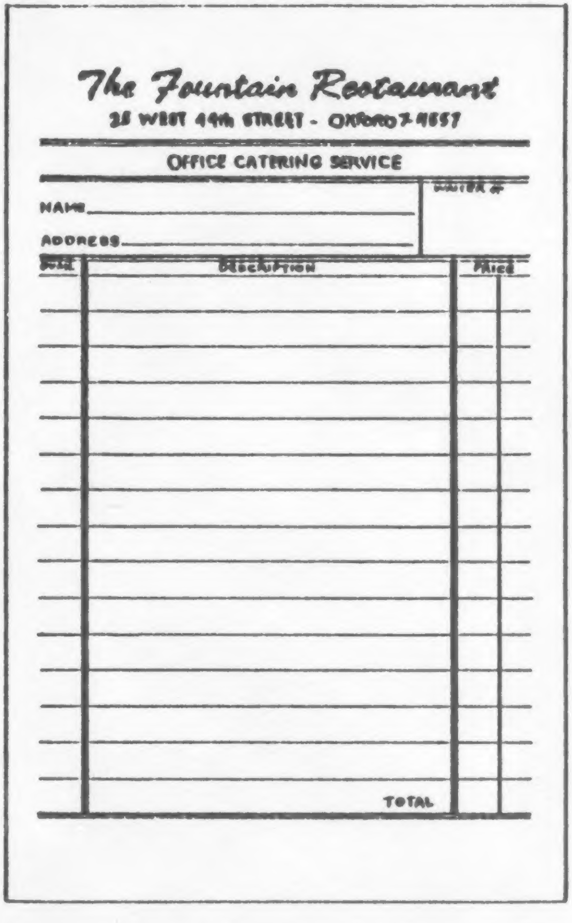
Area Code Number Extension

TELEPHONED	☐	PLEASE CALL	☐
CALLED TO SEE YOU	☐	WILL CALL AGAIN	☐
WANTS TO SEE YOU	☐	URGENT	☐
	RETURNED YOUR CALL	☐	

Message____________________

Operator

Campbell 09301



The Fountain Restaurant

25 WEST 44th STREET - OXFORD 7-4657

OFFICE CATERING SERVICE

NAME____________________

ADDRESS____________________

WAITER #

[illegible]	DESCRIPTION	PRICE
	TOTAL	

INFORMATION

Date ____________________

Name ____
Last First Middle Initial

ARE YOU RECEIVING FINANCIAL AID ☐ **YES** ☐ **NO**

ARE YOU RECEIVING VETERANS BENEFITS ☐ **YES** ☐ **NO**

THIS IS: (CHECK ONE)

Student Self Initiated Drop ☐
College Initiated Administrative Drop ☐

The student is responsible for returning this form to the Registrars office. The date the completed form is received by the Registrars office is the effective date. Refunds will be processed as of this date.

____
STUDENT SIGNATURE

						OFFICE USE ONLY
	Course Code Number	**Section Number**	**Credits**	**Instructor's Approval**	**Grade at Time of Drop**	**Refund %**
DROP						
HERE						

						OFFICE USE ONLY			
	Course Code Number	**Section Number**	**Credits**	**Instr. Appr.**	**Dept. Appr.**	**Seats**	**Bill Code**	**Repeat**	**Audit**
ADD									
HERE									

WORD GUIDE

IRREGULAR - DIFFERENTLY OR ODDLY SHAPED.

PREPARATION - THE ACT OF GETTING READY.

MATHEMATICALLY - USING MATH.

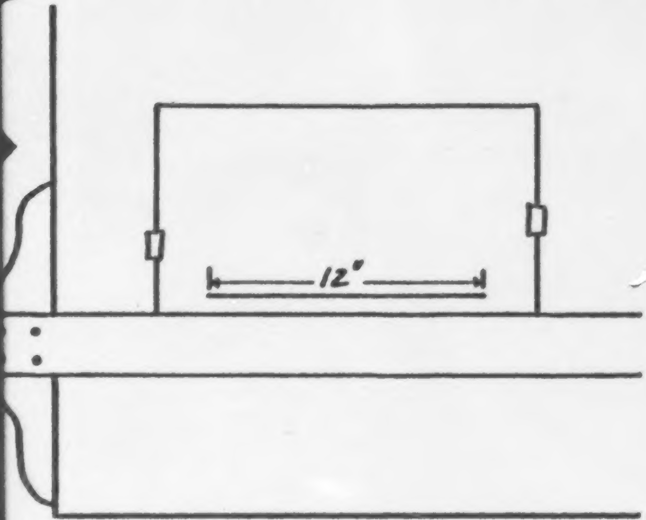
INFORMATION

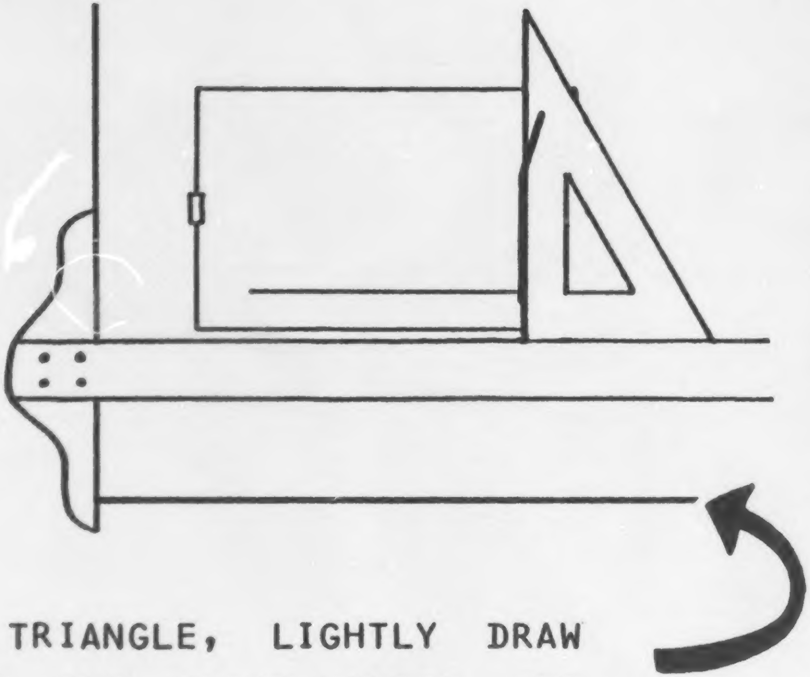
THE MOST IMPORTANT THING TO LEARN IS HOW
O DIVIDE ODD-SIZED AREAS INTO EQUAL SPACES,
SPECIALLY IN THE PREPARATION OF CHARTS, AND
RAPHS. A FAST AND ACCURATE SYSTEM IS THE
DIAGONAL APPROACH PRINCIPLE". THIS INVOLVES
HE USE OF THE RULER TURNED DIAGONALLY TO
EASURE OFF EQUAL DISTANCES WITHIN IRREGULAR
R ODD-SIZED AREAS. FOR INSTANCE: DIVIDE 12
NTO 13 EQUAL PARTS. IN ORDER TO DO THIS
ATHEMATICALLY (SO THAT THE PARTS CAN BE
EASURED WITH A RULER) YOU WOULD NEED A
OMPUTER. WITH THE "DIAGONAL APPROACH PRINCIPLE"
D. A. P.), IT CAN BE DONE EASILY.

INFORMATION

FOLLOW THESE STEPS:

1. WITH A T-SQUARE, DRAW A HORIZONTAL LINE EXACTLY 12" LONG IN PENCIL.





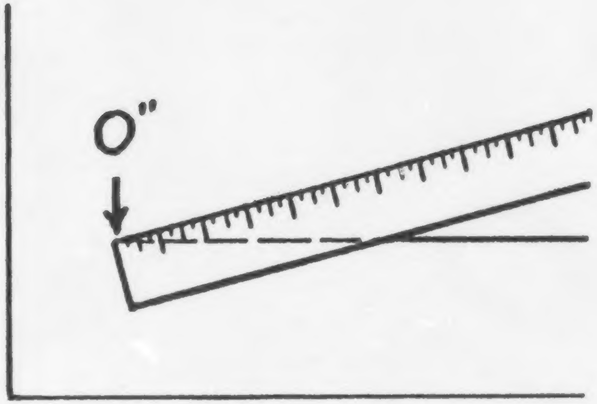
2. WITH T-SQUARE AND TRIANGLE, LIGHTLY DRAW A VERTICAL LINE AT THE RIGHT-HANDED END OF THE 12" LINE.

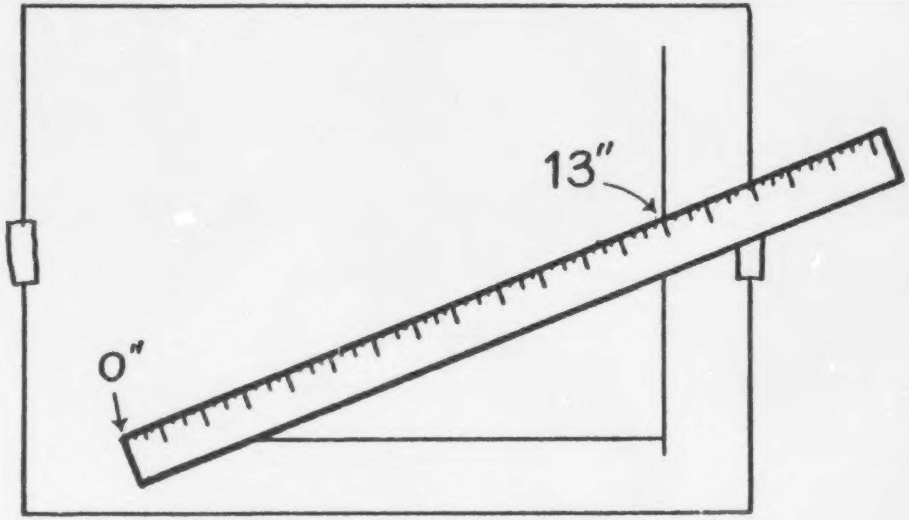
WORD GUIDE

PIVOTING - SWINGING AROUND A FIXED POINT.

INFORMATION

3. PLACE THE ZERO MARK OF YOUR RULER EXACTLY AT THE LEFT HAND END OF 12" LINE.

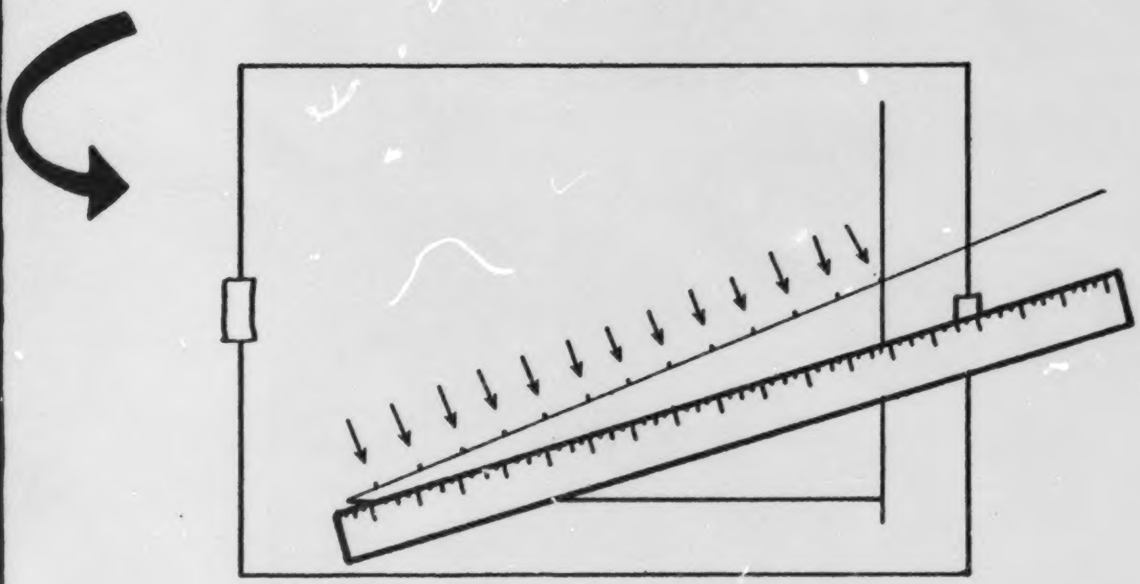




4. PIVOTING THE RULER AT THIS POINT (STEP 3), SWING THE OTHER END UNTIL THE 13" MARK TOUCHES THE VERTICAL LINE.

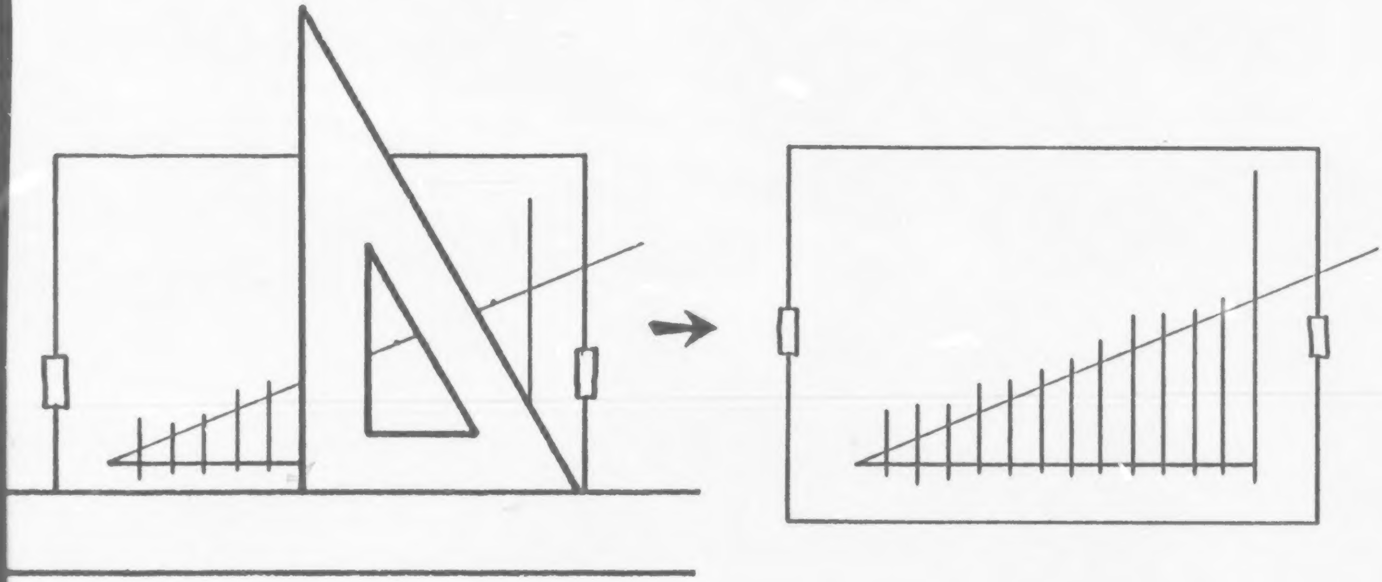
INFORMATION

5. ONCE YOU GET THIS DIAGONAL POSITION, HOLD YOUR RULER FIRMLY IN PLACE AND DRAW A LIGHT PENCIL LINE ALONG ITS EDGE. NOW, RULER STILL IN PLACE, MARK OFF EACH INCH (13 EQUAL PARTS).



INFORMATION

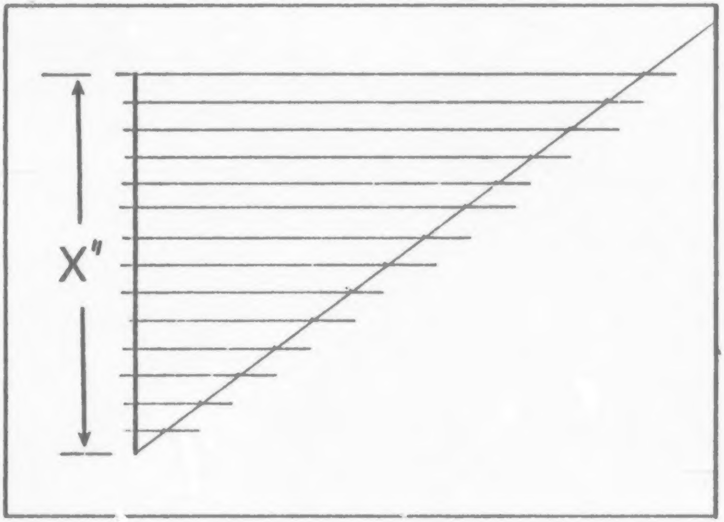
6. REMOVE THE RULER AND, WITH T-SQUARE AND TRIANGLE, LIGHTLY DRAW VERTICAL PENCIL LINES ACCURATELY THROUGH EACH MARK ON THE DIAGONAL LINE AND THROUGH THE 12" LINE. YOU HAVE DIVIDED 12" INTO 13 EQUAL PARTS.



INFORMATION

THIS D. A. P. METHOD WORKS FOR ANY EQUAL SPACING DIVISION PROBLEM. FOR EXAMPLE: 9" INTO 6 EQUAL PARTS: PIVOT ON ZERO TO 12" AND MARK OFF EVERY 2" (12 ÷ 2 - 6); 20" INTO EIGHT EQUAL PARTS: PIVOT ON ZERO TO 24" AND MARK OFF EVERY 3" (24 ÷ 3 - 8); ETC.

TO GET THE EQUAL SPACING OF AN ODD-SIZED VERTICAL DISTANCE, THE METHOD IS THE SAME EXCEPT: USING A T-SQUARE, DRAW A HORIZONTAL PENCIL LINE AT ONE END OF THE VERTICAL. THEN, DRAW THE LINE THROUGH EACH MEASURED MARK AND THE VERTICAL LINE.



INFORMATION

TO USE THE DIAGONAL APPROACH PRINCIPLE, YOU NEED TO KNOW:

1. THE MEASUREMENT THAT MUST BE DIVIDED INTO EQUAL PARTS.

2. THE NUMBER OF EQUAL PARTS DESIRED.

3. A MEASUREMENT LARGER THAN #1 AND EASILY DIVIDABLE BY #2.

NATURALLY, THE D. A. P. METHOD IS USED FOR THE DIVISION OF ODD-SIZES (8 3/8", 3 5/16", ETC.) INTO EQUAL PARTS ONLY. TO FIND THE DIVISION (1") OF THE 12" INTO 12 EQUAL PARTS YOU DO NOT NEED THE DIAGONAL APPROACH PRINCIPLE (NOT 5" INTO TWO EQUAL PARTS (2 1/2); 6" INTO 3 EQUAL PARTS (2"), ETC.).

WORD GUIDE

MINIMUM - LOWEST POSSIBLE NUMBER

MAXIMUM - HIGHEST POSSIBLE NUMBER

INFORMATION

WHEN YOU MUST PREPARE A JOB THAT DOES NOT REQUIRE EQUALLY SPACED AREAS (SUCH AS A RESTAURANT RECEIPT FORM), TAKE INTO ACCOUNT HOW MUCH SPACING IS NEEDED FOR EACH AREA. FOR EXAMPLE:

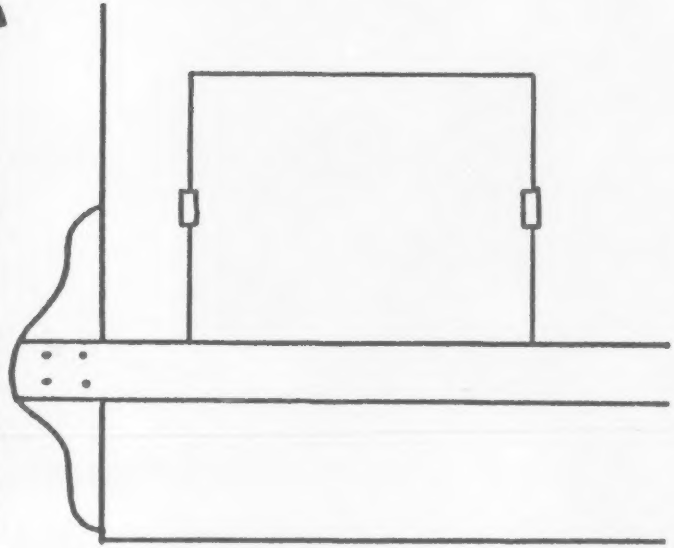
HEAVY LINES ARE USUALLY USED FOR BORDERS OR TO SEPERATE IMPORTANT AREAS (QUANTITY, ITEM DESCRIPTION, PRICE, ETC.). THINNER LINES ARE USED FOR LESS IMPORTANT DIVISIONS.

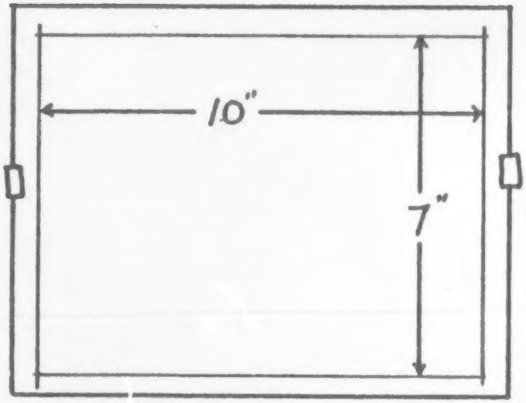
REMEMBER: KEEP THE NUMBER OF DIFFERENT LINE WEIGHTS TO A MINIMUM (THREE IS USUALLY THE MAXIMUM NUMBER) SO THAT THE FORM DOES NOT BECOME CONFUSING. A SIMPLE OR CROSS-RULED FORM SHOULD BE EASILY READABLE AND WELL-BALANCED.

JOB STEPS

1. TAKE ALL MATERIALS AND EQUIPMENT TO YOUR WORK AREA.

2. LINE UP AND TAPE DOWN #32 LEDGER ALONG 11".

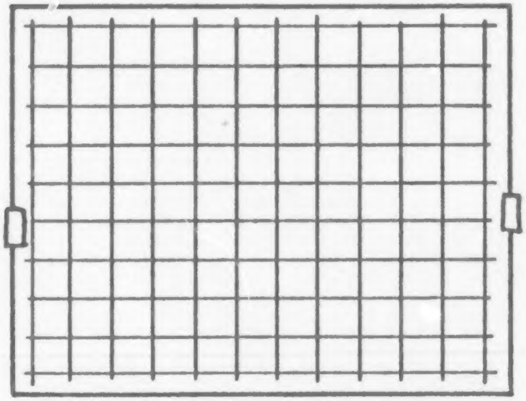


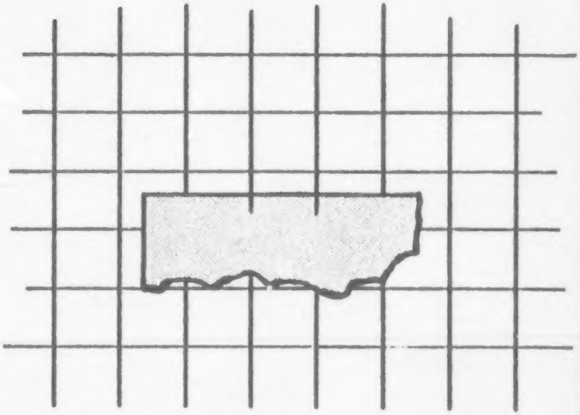


3. IN PENCIL, LIGHTLY DRAW A 10" X 7" RECTANGLE.

JOB STEPS

4. USING THE D. A. P. METHOD, DIVIDE THE 10" X 7" AREA INTO 11 EQUAL VERTICAL COLUMNS (10" ÷ 11) AND 9 EQUAL HORIZONTAL COLUMNS (7" ÷ 9) DRAW THESE DIVISIONS IN PENCIL BEFORE INKING.

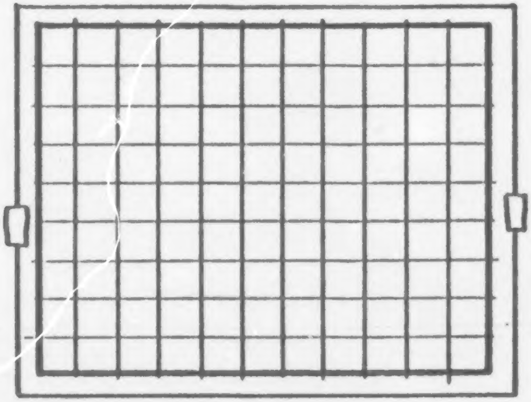


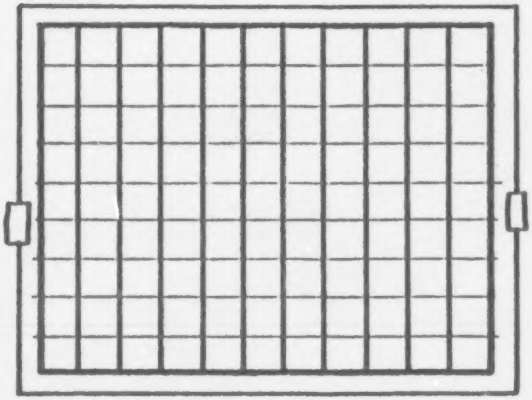


5. CHECK TO SEE THE COLUMNS ARE EQUAL BY MARKING ONE OFF ON A PIECE OF SCRAP PAPER AND COMPARING THIS DISTANCE WITH THE OTHER COLUMNS.

JOB STEPS

6. WITH A HEAVY RULE, INK IN THE OUTSIDE BORDER (10" X 7" RECTANGLE) STOPPING AT THE CORNERS.



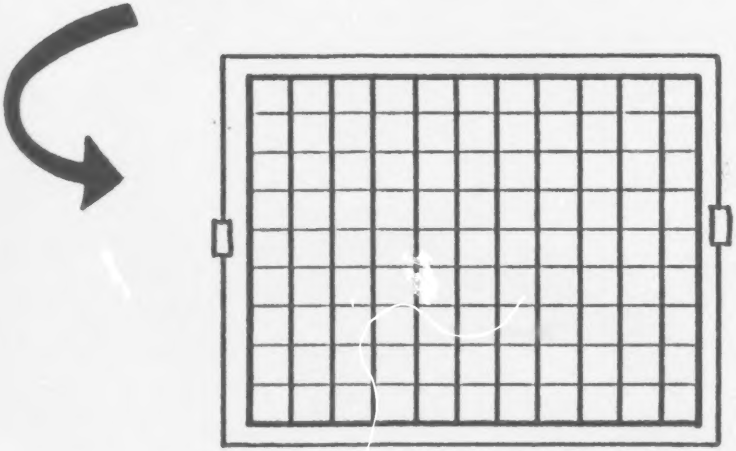


7. WITH A MEDUIM RULE, INK IN THE VERTICAL LINES, STOPPING AT THE BORDER.

TURN PAGE →

JOB STEPS

8. WITH A LIGHT RULE, INK IN THE HORIZONTAL LINES STOPPING AT THE BORDER.



9. WHEN THE INK IS COMPLETELY DRY, ERASE THE PENCIL LINES AND SHOW THE FINISHED PIECE TO YOUR INSTRUCTOR.

graphics

unit: CAMERA (PHOTOMECHANICAL REPRODUCTION)

capital area career center

module: 1401 10 022 7 **date:** 8/77 **level:** II

skill title: MAKING PMT HALFTONE PRINTS

developed & written by: GLEN PETTIT

visuals by: MIKE SMITH

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO MAKE PMT HALFTONE PRINTS FROM PHOTOGRAPHS THAT ARE ON SEVERAL KINDS OF PHOTOGRAPHIC PAPERS AND HAVE DIFFERENT TONAL RANGES.

AND IN ORDER TO DO THIS YOU WILL NEED:

PROCESS CAMERA AND DARKROOM

PMT MATERIALS

PMT HALFTONE SCREEN

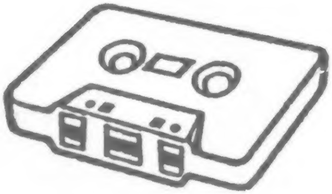
8 PHOTOGRAPHS

GRAY SCALE AND HALFTONE COMPUTER

WE WILL KNOW YOU CAN DO IT WHEN:

1. YOU CAN EXAMINE A PHOTOGRAPH BEFORE MAKING A PMT HALFTONE PRINT AND ESTIMATE WHAT THE CORRECTED EXPOSURES SHOULD BE.

2. YOU CAN THEN EVALUATE DOT QUALITY AND DOT SIZE ON YOUR PRINT, RE-EXPOSE IF NECESSARY AND PRODUCE A PRINTABLE PMT HALFTONE PRINT THE SECOND TIME.



A TAPE OF THIS MODULE IS AVAILABLE

INFORMATION

IT WOULD BE IDEAL IF ALL PHOTOGRAPHS FOR A JOB WERE OF THE SAME QUALITY, TAKEN BY THE SAME PHOTOGRAPHER AND PRINTED ON THE SAME PHOTOGRAPHIC PAPER. MOST JOBS WITH HALFTONES WILL HAVE SEVERAL DIFFERENT KINDS OF PHOTOGRAPHS. LOOK FOR:

DIFFERENT TEXTURE PAPERS
DIFFERENT PAPER SURFACES
DIFFERENT DEVELOPERS
AGE OF THE PRINT
SHARPNESS OF DETAIL AND FOCUS
GRAIN SIZE AND TEXTURE

ALL OF THE ABOVE REQUIRE SPECIAL THOUGHT AND TREATMENT IF YOU ARE GOING TO PRODUCE GOOD PMT HALFTONE PRINTS THAT CAN BE PRINTED.

INFORMATION

IT IS NECESSARY TO TRAIN YOUR EYE TO SEE THE CORRECT TONAL RANGE. THAT'S WHY YOU SHOULD ALWAYS USE THE GRAY SCALE AND KEEP IT CLEAN. AS YOU LEARNED IN MOD 1401 10 021 7, "CALIBRATING THE CAMERA FOR HALFTONE EXPOSURES", THERE ARE MANY TONES OF WHITE AND BLACK. IT IS UNUSUAL TO GET A GOOD PHOTOGRAPH THAT HAS A TRUE WHITE (0%) OR MORE THAN A 75% BLACK.

FOR THIS MOD YOU WILL BE GIVEN AT LEAST EIGHT PHOTOGRAPHS, INCLUDING:

AN UNDEREXPOSED PRINT
AN OVEREXPOSED PRINT
A POLAROID PRINT
A COLOR PRINT
AN OLD, YELLOWED PRINT
A GLOSSY FINISH PRINT
A MATT FINISH PRINT

INFORMATION

THE OBJECTIVE IS TO MAKE A GOOD PMT HALFTONE PRINT FROM EACH PHOTOGRAPH. USING YOUR JUDGEMENT, THE GRAY SCALE AND THE KODAK HALFTONE COMPUTER, TRY TO COMPUTE THE CORRECT FLASH AND MAIN EXPOSURE. YOU MAY SHOOT SOME OF THESE "PROBLEM" PHOTOGRAPHS 4 OR 5 TIMES (THAT HAPPENS IN INDUSTRY TOO).

IT WOULD HELP IF YOU WRITE ALL YOUR INFORMATION ON A PIECE OF PAPER (CDR, FLASH AND MAIN) AND INCLUDE THIS WHERE YOU EXPOSE EACH DIFFERENT PHOTOGRAPH.

WORD GUIDE

ILLUMINATION - LIGHTING.

JOB STEPS

1. COMPLETE MODS 1401 10 020 7 AND MOD 1401 10 021 7 BEFORE STARTING THIS MOD.

2. TAKE ALL EQUIPMENT AND MATERIALS TO YOUR WORK AREA.

3. USE THE INFORMATION AND EXPOSURE TIMES YOU COMPUTED IN THE LAST MOD FOR MAKING PMT HALFTONE PRINTS. GET THE KODAK HALFTONE COMPUTER AND GRAY SCALE AND COMPUTE THE CDR, THE FIRST OF YOUR EIGHT PHOTOGRAPHS.

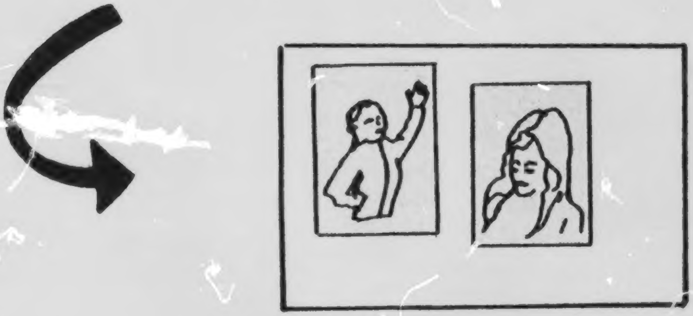
NOTE: BE SURE TO ALWAYS STAND IN THE SAME PLACE WITH THE SAME ILLUMINATION TO DETERMINE EXPOSURES.

JOB STEPS

4. WRITE DOWN THE CDR, MAIN EXPOSURE, FLASH EXPOSURE, YOUR NAME AND DATE ON A SMALL PIECE OF PAPER AND INCLUDE THIS WITH YOUR SHOT.

   NOTE: TRY TO KEEP THE FINAL PMT PRINT SIZE TO 10 X 12 CM PMT NEGATIVE MATERIAL, WHENEVER POSSIBLE.

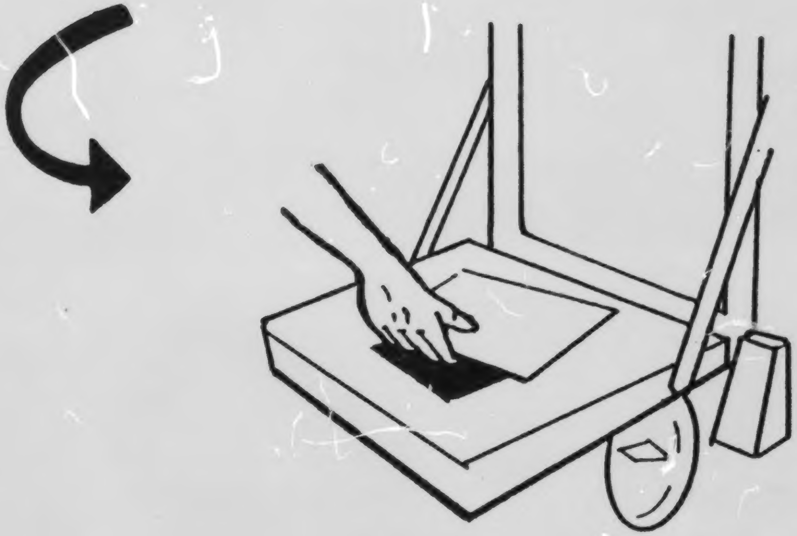
5. TO SOME COST AND MATERIALS, TRY TO MAKE TWO DIFFERENT EXPOSURES ON EACH PIECE OF 10 X 12 CM PMT NEGATIVE MATERIAL, WHENEVER POSSIBLE.



JOB STEPS

6. PLACE YOUR COPY, GRAY SCALE AND INFORMATION SHEET ON THE CAMERA AND SET THE EXPOSURE TIMES.

7. PLACE THE PMT NEGATIVE MATERIAL ON THE VACUUM BOARD, PUT THE PMT HALFTONE SCREEN OVER THIS, CLOSE AND THEN MAKE YOUR MAIN AND FLASH EXPOSURES.



JOB STEPS

8. AFTER EXPOSURE, RETURN THE SCREEN AND PROCESS THE PMT NEGATIVE TO THE RECEIVER.

9. EVALUATE YOUR SHOTS. BE SURE YOU LOOK AT THE HIGHLIGHT AND SHADOW DOTS IN THE ORIGINAL PHOTOGRAPHS, NOT THE GRAY SCALE. DO YOU HAVE A 10% HIGHLIGHT AND A 90% SHADOW? USE A MARKER AND INDICATE THESE ON THE PMT HALFTONE PRINT.

10. CONTINUE EXPOSING ALL EIGHT PHOTOGRAPHS UNTIL YOU HAVE MADE THE BEST PMT HALFTONE PRINT FOR EACH ONE.

11. WHEN FINISHED, HAVE YOUR INSTRUCTOR CHECK YOUR WORK. SHOW ONLY THE BEST EIGHT PMT HALFTONE PRINTS AND BE PREPARED TO ANSWER QUESTIONS.

SELF QUIZ

WRITE YOUR ANSWERS ON A SEPARATE SHEET OF PAPER.

1. WHAT DOES CDR MEAN?

2. WHAT DOES BDR MEAN?

3. IF A PHOTOGRAPH HAS A .1 HIGHLIGHT AND A 1.5 SHADOW, WHAT IS THE CDR?

4. WHAT COLOR-TEMPERATURE IS THE FLASH EXPOSURE?

5. WHAT SIZE DOT MAKES A GOOD-PRINTABLE HIGHLIGHT?

6. IF YOU INCREASE THE MAIN EXPOSURE, WHAT HAPPENS TO THE HIGHLIGHT DOT?

SELF QUIZ

7. WHAT HAPPENS TO THE SHADOW DOT WHEN YOU INCREASE THE FLASH EXPOSURE?

8. DURING EXPOSURE, IN WHICH POSITION SHOULD YOU HAVE THE EMULSION SIDE OF THE CONTACT SCREEN?

9. IF THE WHITE AREAS ON THE PRINT ARE COMPLETELY WHITE, WITH NO HIGHLIGHT DOT, WHAT CORRECTION DO YOU MAKE?

10. IF THE HIGHLIGHTS ARE GOOD BUT THE SHADOWS ARE SOLID, WHAT CORRECTION DO YOU MAKE?

TURN PAGE →

ANSWERS TO SELF QUIZ

1. COPY DENSITY RANGE
2. BASIC DENSITY RANGE
3. 1, 4
4. YELLOW OA
5. 10%
6. GETS SMALLER
7. GETS SMALLER
8. DOWN
9. REDUCE MAIN EXPOSURE
10. INCREASE FLASH EXPOSURE

graphics

unit: STRIPPING

capital area career center

module: 1401 11 009 7 date: 6/77 level:

skill title: SCRIBING RULES, BORDERS, BOXES, AND WINDOWS

developed & written by: GLEN PETTIT AND DWIGHT SMITH

visuals by: CHUCK KNOCK

WORD GUIDE

SCRIBING - REMOVING A PART OF THE NEGATIVE EMULSION TO PRODUCE A CLEAR AREA (USUALLY FOR THIN, FINE LINES).

EMULSION - COATING ON SURFACE OF PHOTOGRAPH.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO ACCURATELY SCRIBE LINES, BOXES, AND WINDOWS FOR THIS JOB (INFORMATION CARD).

AND IN ORDER TO DO THIS YOU WILL NEED:

- A LIGHT TABLE
- LINE GAUGE AND TRIANGLE
- SCISSORS
- Q-TIPS
- SCRAP PAPER
- PLATEBURNER

. . . YOU WILL NEED:

T-SQUARE
TAPE (RED AND MASKING)
ROMSEY FILM LINE SCRIBERS
(SET OF THREE)
NEGATIVES: PROJECT 9
OPAQUE AND FIXER
EMULSION REMOVER (CLOROX)

GLASS CLEANER
EXPOSURE GUIDE
OPAQUE BRUSH
5 1/2" X 8 1/2"
SILVERPRINT PAPER

WE WILL KNOW YOU CAN DO IT WHEN:

1. YOU HAVE ACCURATELY AND PROPERLY SCRIBED ALL LINES, BOXES, AND WINDOWS.
2. YOUR LINE THICKNESS IS UNIFORM, CORRECT LENGTH, AND PROPERLY POSITIONED WITHIN 1 MM OF ACCURACY.
3. THE SILVERPRINT PROOF IS CLEAN AND LINES ARE SHARP, SQUARE AND UNIFORM.

A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

THE BEST QUALITY LINES ARE PRODUCED ON THE OPAQUE NEGATIVE BY SCRIBING (REMOVING A UNIFORM LAYER OF THE EMULSION). FREQUENTLY, ON A TABULAR FORM ESPECIALLY, A PASTE-UP HAS MANY SMALLER PIECES AND A UNIFORM LINE CANNOT BE DRAWN ON THIS PASTE-UP. SO IT MUST BE SCRIBED.

WE USE THE "RAMSEY FILM-LINE SCRIBERS", CONSISTING OF THREE TOOLS (GREEN-THIN, GREY-MEDIUM, YELLOW-BOLD), WITH A FINELY SHARPENED SPRING STEEL LOOP FOR CUTTING. THIS LOOP HAS A RED NOTCH ON THE LOWER END OF THE HANDLE WHICH SHOULD BE UP SO THE CUTTING EDGE WILL CUT PROPERLY. ONLY ONE SIDE OF THE LOOP IS RAZOR SHARP; THE OTHER SIDE OF THE LOOP WILL SCRAPE A ROUGH EDGE AND TEAR THE EMULSION. IF THE SCRIBER IS DROPPED ON THIS SPRING STEEL LOOP, IT MAY SHATTER AND BREAK.

INFORMATION

A NEGATIVE IS APPROXIMATELY 85% CLEAR PLASTIC BASE AND ONLY 15% SOFT EMULSION. YOU ARE ONLY REMOVING ABOUT .001" EMULSION. ONLY A LITTLE PRESSURE IS NEEDED BECAUSE THE CUTTING EDGE OF THE SCRIBER IS RAZOR SHARP.

IF YOU HAVE A DIRTY NEGATIVE (A LOT OF PIN HOLES) THAT YOU MUST USE AND THERE ARE A LOT OF LINES TO BE SCRIBED, YOU MAY USE A THIN OPAQUE ON THE EMULSION SIDE, KEEPING AT LEASE 2-3 MM AWAY FROM THE IMAGE. WHEN DRY, SCRIBE AS YOU NORMALLY WOULD. THE SCRIBER WILL EASILY CUT THROUGH THE EMULSION AND THE OPAQUE.

IF YOU HAVE ENOUGH ROOM, SCRIBE ALL YOUR LINES LONGER THAN NEEDED ON A FORM. THEN, ON THE TOP (BASE) SIDE OF THE NEGATIVE, USE TAPE OR OPAQUE TO START AND FINISH ALL THE LINES STRAIGHT AND VERTICALLY.

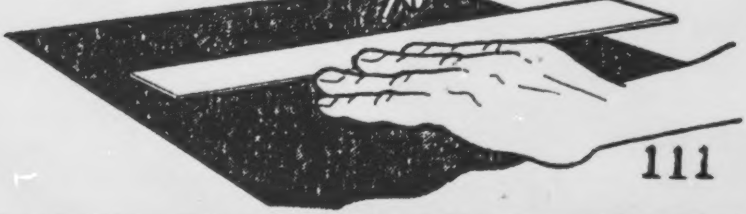
WORD GUIDE

VARY - CHANGE

CONSISTENT - ALWAYS THE SAME

INFORMATION

THE SCRIBER IS HELD STRAIGHT ABOVE THE LINE OF WORK BUT IS TILTED ABOUT 30° IN THE DIRECTION OF PULL. ALWAYS PULL THE TOOL TOWARD YOU OR TO THE PULLING HAND (RIGHT HANDED PULLS TO THE RIGHT). IT IS BEST TO ALWAYS USE A METAL STRAIGHT EDGE, RULER, OR METAL ANGLE AS A GUIDE, BECAUSE PLASTIC MAY HAVE A NICKED OR CHIPPED EDGE. ALWAYS USE A CONSISTENT OR LIGHT PRESSURE WHEN PULLING. DO NOT VARY THE PRESSURE AS THIS WILL CHANGE THE THICKNESS OF THE LINE.



WORD GUIDE

PREVENT - STOP FROM HAPPENING

INFORMATION

FOR LONGER LINES (3-4" LONG), MOVE YOUR ENTIRE BODY AS YOU SCRIBE THE LINE. MOVING ONLY YOUR ARM WILL CHANGE THE PRESSURE CONSIDERABLY. SHIFTING YOUR BODY ON YOUR FEET HAS NO REAL EFFECT ON THE LINE. BE SURE YOUR GUIDE DOES NOT MOVE. ONCE YOU START A LINE, DO NOT STOP. IT IS VERY DIFFICULT TO START EVENLY AGAIN. OFTEN, THE FIRST AND LAST 3 MM OF A LINE ARE A LITTLE HEAVY. PRACTICE WILL PREVENT THIS COMMON ERROR.

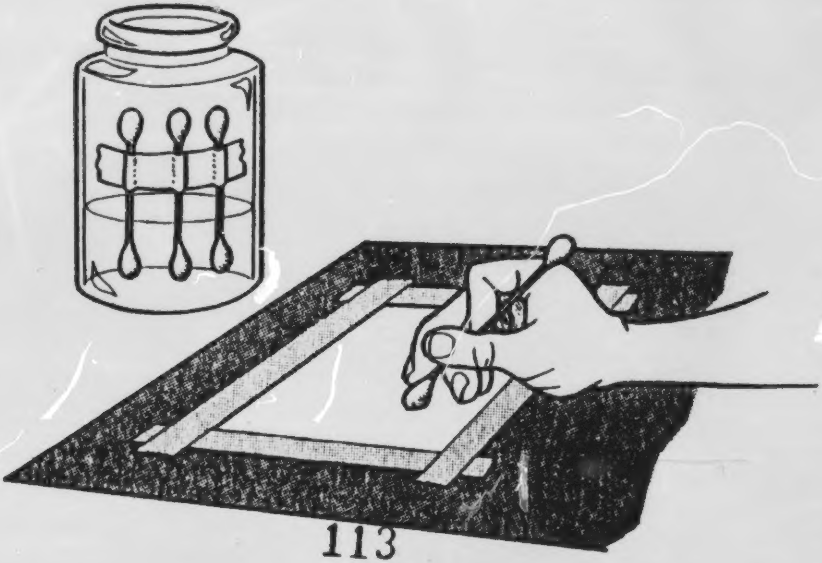
IN CLEARING A LARGE AREA, YOU WOULD USE THE BOLD YELLOW SCRIBER. BE CAREFUL THAT YOU DO NOT TAKE OUT TOO MUCH OF THE BASE. IT IS EASY TO CUT CLEAR THROUGH THE ENTIRE NEGATIVE WHEN SCRIBING IN THE SAME PLACE.

WORD GUIDE

FUME - ODOR, SMELL
INHALING - BREATHING IN

INFORMATION

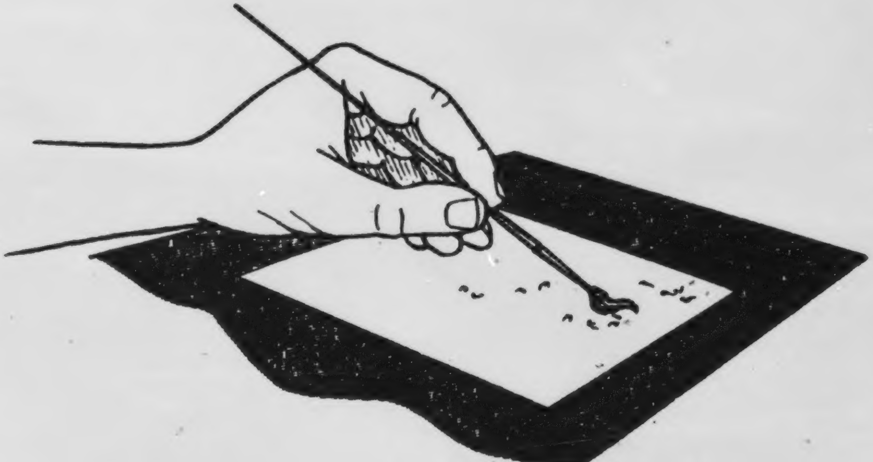
TO CLEAR LARGE SOLID AREAS, IT IS BEST TO USE A FILM REMOVER LIKE CLOROX. REMEMBER - THIS HAS A STRONG FUME SO AVOID INHALING DIRECTLY OR USING TOO MUCH. CLOROX IS A BLEACH AND WILL TURN CLOTHES WHITE IF SPILLED. USE ONLY A LITTLE AT A TIME.



INFORMATION

CAREFUL THE CONTAINER DOES NOT SPILL (THE LEVEL SHOULD ONLY BE ABOUT 1/2" FULL). HOLD Q-TIPS ON THE SIDE OF THE CLOROX JAR. THEY MAY BE RE-USED SO SAVE YOUR Q-TIP, IF IT IS STILL CLEAN.

BE SURE TO THROW AWAY THE SCRIBING EMULSION SHAVINGS (MASKING TAPE PICKS THEM UP EASILY). WHEN FINISHED, GENTLY BRUSH OFF YOUR FLATS OR NEGATIVES TO CLEAR ANY REMAINING FINE SHAVINGS.



WORD GUIDE

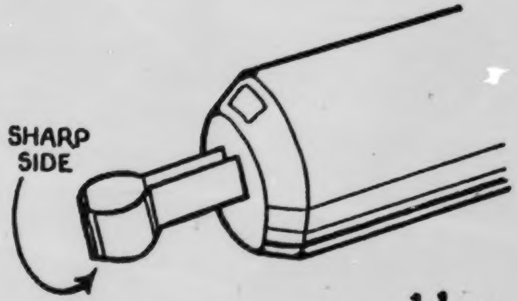
EXAMINE - STUDY CLOSELY

JOB STEPS

1. TAKE ALL EQUIPMENT AND MATERIALS TO YOUR WORK AREA.

2. GET AND CLEAN A LIGHT TABLE.

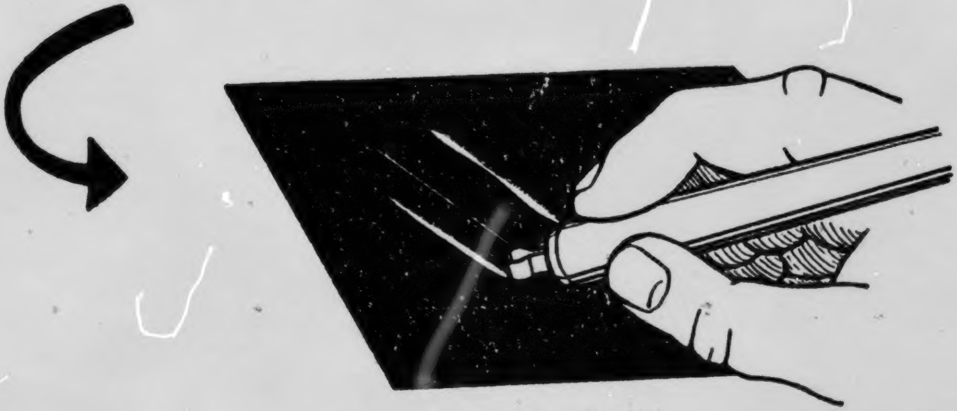
3. LOCATE THE SET OF RAMSEY FILM LINE SCRIBERS AND EXAMINE ALL THREE CAREFULLY. NOTE THE NOTCH AND THE SHARPENED SIDE OF THE SPRING STEEL LOOP.



JOB STEPS

4. ON SOME SMALL SCRAP PIECES OF OPAQUE FILM, PRACTICE SCRIBING SOME LINES. DRAW SOME THIN PENCIL LINES AND BOXES. THEN, TRY TO SCRIBE ON THESE PENCIL LINES EXACTLY, STARTING AND STOPPING WHERE YOU WANT.

5. ON A SCRAP NEGATIVE, MAKE SEVERAL LONG SCRIBE LINES BUT VARY THE PRESSURE AND THE ANGLE OF THE SCRIBER. NOTE THE DIFFERENCE IN THICKNESS.



JOB STEPS

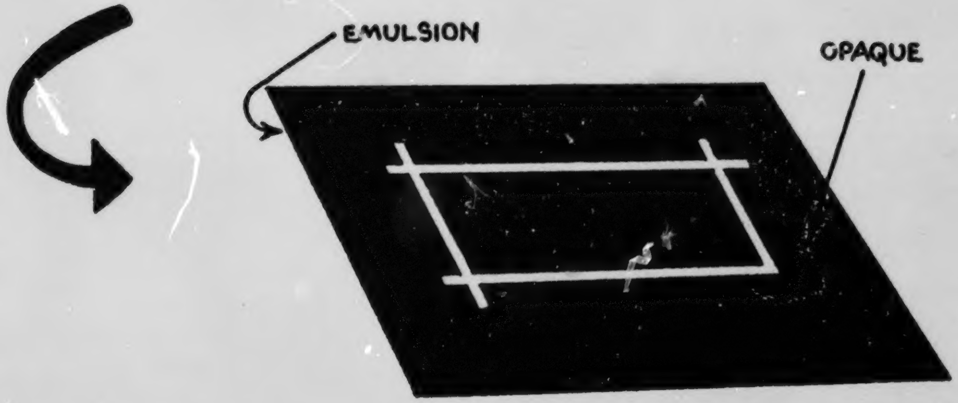
6. NOW, PRACTICE SCRIBING THROUGH IMAGE AREAS ON THE SCRAP NEGATIVE:

   A. SCRIBE A 2" LINE THROUGH THE IMAGE AREA ON THE EMULSION SIDE. THEN, ON THE BASE SIDE, USE 1/4" RED LITHO TAPE TO BLOCK OUT THE UNWANTED IMAGE AREA ON EACH SIDE OF YOUR LINE. BE CAREFUL THAT YOU DO NOT PULL THE TAPE TOO HARD AND STRETCH IT AS IT WILL WRINKLE AND SHRINK LATER.

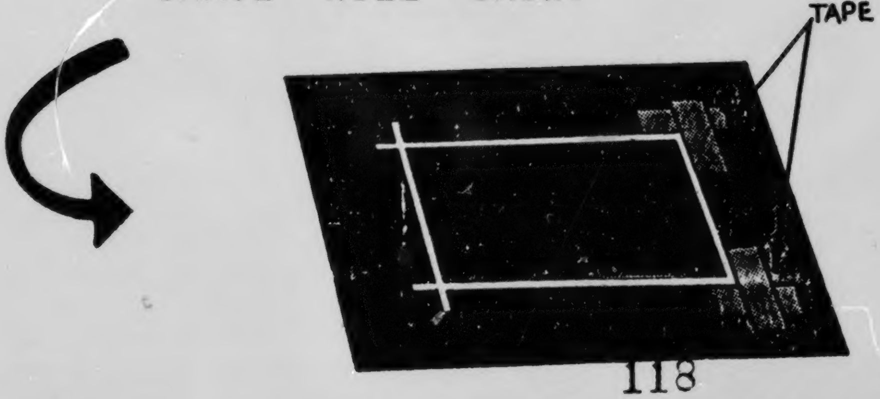
   B. FIRST, OPAQUE-OUT A 1/2" X 2" AREA ON THE EMULSION SIDE OF THIS SCRAP NEGATIVE. BRUSH ON THE OPAQUE THINLY (SPEED DRYING BY WARMING ON THE PLATE RUB-UP TABLE; USE THE "HEAT/AIR" SWITCH). WHEN DRY, SCRIBE YOUR LINE THROUGH THIS AREA AND EXAMINE IT.

JOB STEPS

7. PRACTICE WITH SOME MORE SQUARES ON THE SCRAP NEGATIVE. MAKE YOUR LINES TOO LONG SO THEY OVERLAP AND THEN OPAQUE SOME TO MAKE THE BOX NEAT.



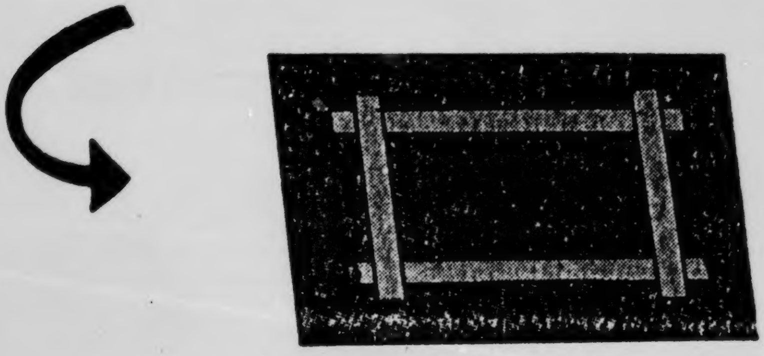
8. THEN, USE RED LITHO TAPE TO TAPE THE CORNER. CUT THE TAPE SO ONLY THE DESIRED IMAGE WILL SHOW.



JOB STEPS

9. PRACTICE CLEARING A SMALL AREA ON THE SCRAP NEGATIVE BY USING A LOT OF OVERLAPPING SCRIBE LINES.

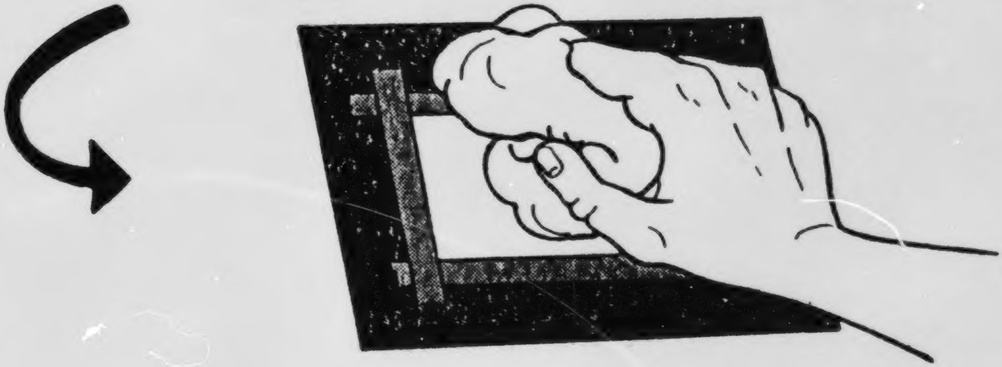
10. PRACTICE CLEARING A SMALL AREA ON THE SCRAP NEGATIVE BY USING CLOROX. TAPE 1/2" RED LITHO TAPE ON THE EMULSION SIDE, MAKING A COMPLETE BORDER AROUND THE AREA YOU WANT CLEARED. BE SURE THE INSIDE EDGE IS DOWN TIGHT SO THE LIQUID WILL NOT SEEP UNDER.



JOB STEPS

11. USING THE CLOROX ON A Q-TIP, GENTLY START RUBBING THIS AREA. IN A FEW WIPES, THE OPAQUE EMULSION WILL DISSOLVE CLEAR.

12. WHEN CLEARED, WIPE THE AREA WITH A SLIGHTLY MOIST COTTON PAD OR PIECE OF RAG. WHEN DRY, REMOVE THE TAPE.



13. GET THE NEGATIVE FOR STRIPPING PROJECT #9: "SCRIBING".

NOTE: THERE ARE TWO HALVES TO THIS 5 X 6" NEGATIVE; THE TOP HALF CONSISTS OF SEVEN EXERCISES AND THE BOTTOM HALF IS A SAMPLE COMMON SCRIBING JOB (SEE "INFORMATION CARD").

JOB STEPS

14. USING THE TOP PORTION OF THIS NEGATIVE (IT DOES NOT HAVE TO BE CUT APART), TAPE IT STRAIGHT AND TIGHTLY TO THE LIGHT TABLE, EMULSION SIDE UP (REFER TO THE ILLUSTRATION #2 WHICH SHOWS WHAT THE COMPLETED EXERCISE WILL LOOK LIKE)

    A. A 1/4" IN FROM THE THREE SIDES OF THE LARGE BORDER, SCRIBE EIGHT FINE LINES, ALL WITHIN A 1/4" THICK COLUMN, 2" HIGH.

    B. AROUND THE WORD SCRIBING, SCRIBE A FINE 1/4" X 2" BOX SO THE WORD IS CENTERED. THEN, WITHIN THIS, SCRIBE ANOTHER FINE LINE BOX AS CLOSE TO THE FIRST BOX AS POSSIBLE WITHOUT TOUCHING IT.

JOB STEPS

14. C. THERE ARE FOUR PAIRS OF XX'S. SCRIBE A BOLD 1/4" BOX AROUND EACH OF THE FOUR XX'S SO THEY ARE CENTERED IN THE BOXES.

D. SCRIBE A MEDIUM 1/4" X 2" BOX CENTERED AROUND THE WORDS, "STRIPPING PROJECT #9".

E. USING THE RAMSEY FILM SCRIBERS, SCRIBE A CLEAR AREA 1/4" FROM THE TWO SIDES OF THE LARGE BORDER IN THE UPPER LEFT CORNER.

F. USING THE RED LITHO TAPE AND EMULSION REMOVER, CLEAR A LARGE AREA: 1 CM X 2 1/2 CM. THIS AREA SHOULD BE 1/4" FROM THE LEFT LARGE BORDER, 3/4" FROM THE TOP LARGE BORDER (1/4" FORM THE CLEAR AREA IN PART E.

WORD GUIDE

EXPOSURE GUIDE - THIS IS A SCALE OR GUIDE THE CAMERA-PERSON USES TO AID IN PROCESSING FILM.

JOB STEPS

14. G. THE GREY SCALE OR EXPOSURE GUIDE HAS BEEN LEFT IN AREA SEVEN, SO YOU ARE TO SCRIBE THREE LINES THROUGH THIS AREA. MAKE TWO LINES USING THE OPAQUE METHOD AND ONE USING THE RED TAPE METHOD.

WHEN YOU HAVE COMPLETED THIS FIRST EXERCISE AND DOUBLE-CHECKED YOURSELF, GO ON WITH THE SECOND HALF.

TURN PAGE

JOB STEPS

15. THIS IS AN EXAMPLE OF A COMMON SIMPLE SCRIBING JOB. SCRIBE A 3/8" X 2+ BOX AROUND THE TITLE "INFORMATION CARD" USING THE MEDIUM SCRIBER.

16. SCRIBE IN THE FINE LINES TO COMPLETE THE FOUR INFORMATION LINES (THE SCRIBED LINES SHOULD STAY 1 MM FROM WORDS AND NOT EXCEED A TOTAL OF 3 1/2" WIDE FOR THE ENTIRE INFORMATION GROUP).

17. SCRIBE FIVE, FINE-LINE BOXES, A T 1/8" SQUARE NEAR THE BOTTOM, IN FRONT OF EACH WORD UNDER "CHECK ONE" CATEGORY.

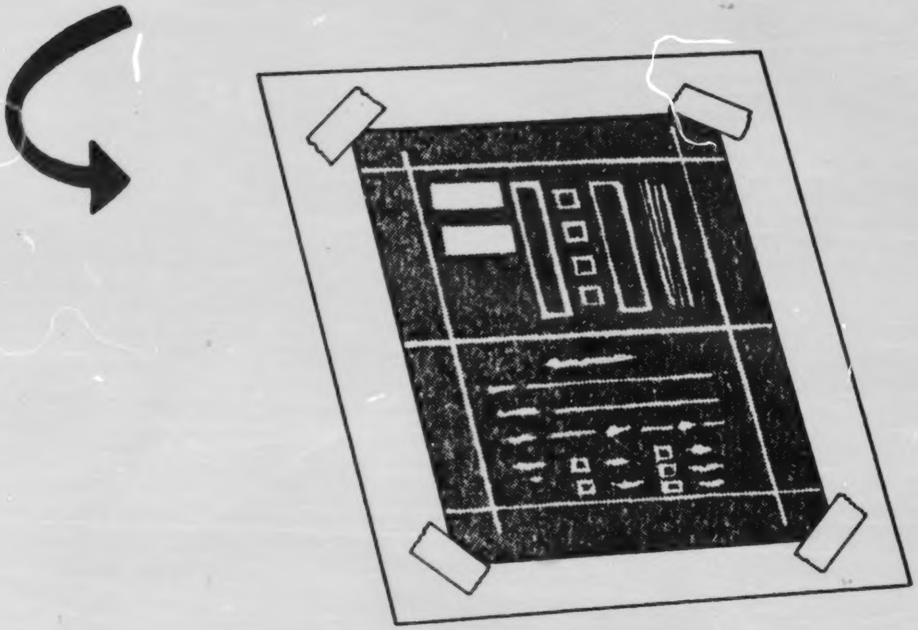
18. MAKE ANY NECESSARY CORRECTIONS ON BOTH EXERCISES.

WORD GUIDE

PERMANENT - ONE WHICH LASTS A LONG TIME; THE FINAL ONE.

JOB STEPS

19. PLACE BOTH NEGATIVE PROJECTS ON A PIECE OF 5 1/2" X 8 1/2" SILVERPRINT PAPER. EXPOSE AND PROCESS FOR A PERMANENT PROOF.



TURN PAGE →

JOB STEPS

20. TAPE THE NEGATIVES TO A PIECE OF 8 1/2" X 11" #20 BOND AND THE SILVERPRINT TO ANOTHER PIECE FOR YOUR NOTEBOOK.

21. ASK YOUR INSTRUCTOR/MANAGER TO CHECK YOUR WORK.

graphics

unit: PRESSWORK

capital area career center

module: 1401 13 210 7 date: 4/77 level: II

skill title: HOW TO PRINT ELECTROSTATIC AND DIRECT IMAGE MASTERS ON THE OFFSET PRESS

developed & written by: GLEN PETTIT AND DWIGHT SMITH

visuals by: MARIE GOUGEON

WORD GUIDE

ELECTROSTATIC – A WAY OF USING POSITIVE AND NEGATIVE ELECTRICITY TO MAKE A PRINTING PLATE.

DIRECT IMAGE – A TYPE OF PRINTING PLATE ON WHICH YOU PUT THE IMAGE WITH SPECIAL MARKERS, INK OR TYPEWRITER RIBBONS.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO PRINT WITH ELECTROSTATIC MASTERS AND DIRECT IMAGE PAPER MASTERS.

AND IN ORDER TO DO THIS YOU WILL NEED:

A.B. DICK OFFSET PRESS (350 OR 360 MODEL)
OFFSET CHEMICALS AND SUPPLIES
PRE-MADE ELECTROSTATIC MASTERS
DIRECT IMAGE MASTERS AND MARKERS

WORD GUIDE

TONING - BACKGROUND WITH SMALL BLACK DOTS. THESE AREAS SHOULD BE WHITE (ALSO CALLED "SCUM"). TONING IS CAUSED BY TOO LITTLE OR TOO MUCH WATER OR THE WRONG FOUNTAIN SOLUTION.

WE WILL KNOW THAT YOU CAN DO IT WHEN:

1. YOU HAVE HANDLED, PRINTED AND PRESERVED BOTH PAPER AND ELECTROSTATIC MASTERS.
2. YOU GET THE IMAGE AND FINAL PRINTED PAGES:
   A. POSITIONED
   B. FLAT AND CLEAN
   C. SHARP, CLEAR AND UNIFORM
   D. FREE FROM TRACKING, SCUMMING (TONING) OR STREAKING.

A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

DIRECT IMAGE AND ELECTROSTATIC PRINTING PLATES ARE THE CHEAPEST KINDS. BOTH COST ABOUT $ .10 EACH.

ELECTROSTATIC PLATES ARE MADE IN A SPECIAL MACHINE (REFER TO MOD 1401 12 009 7). DIRECT IMAGE PAPER MASTERS ARE OFTEN MADE ON A TYPEWRITER (REFER TO MOD 1401 12 008 7).

BOTH TYPES OF PLATES ARE USEFUL BECAUSE THEY ARE FAST, CHEAP AND DO NOT REQUIRE EXPENSIVE EQUIPMENT. A CAMERA AND PLATEBURNER MIGHT COST OVER $5,000 BUT AN ELECTROSTATIC PLATEMAKER MIGHT COST AS LITTLE AS $500. FOR DIRECT IMAGE PLATES, YOU NEED ONLY A TYPEWRITER.

BE CAREFUL WHEN YOU HANDLE THESE PLATES. HANDLE THEM BY THE EDGES ONLY. OILS FROM YOUR FINGERS CAN SHOW UP ON THE FINAL JOB. WHEN YOU ETCH THE PLATE FOR PRINTING, DO A GOOD JOB.

INFORMATION

THE FOUNTAIN SOLUTION IS DIFFERENT FROM THE SOLUTION YOU USE FOR PRINTING METAL PLATES. ASK YOUR INSTRUCTOR WHICH FOUNTAIN SOLUTION YOU SHOULD USE. HERE AT THE CACC, WE PRINT ONLY A FEW PAPER AND ELECTROSTATIC MASTERS AT A TIME. YOU WILL USE THE METAL PLATE FOUNTAIN SOLUTION FOR THE PAPER PLATES.

"PHOTO-DIRECT" IS ONE MORE WAY TO MAKE CHEAP PLATES FOR PRINTING. THESE ARE MEDIUM-RUN PLATES (UP TO 5,000 COPIES) AND PRODUCED BY A SPECIAL PHOTO-DIRECT CAMERA. THE PLATES ARE MADE OF PAPER AND PLASTIC AND COST ABOUT $ .50 EACH.

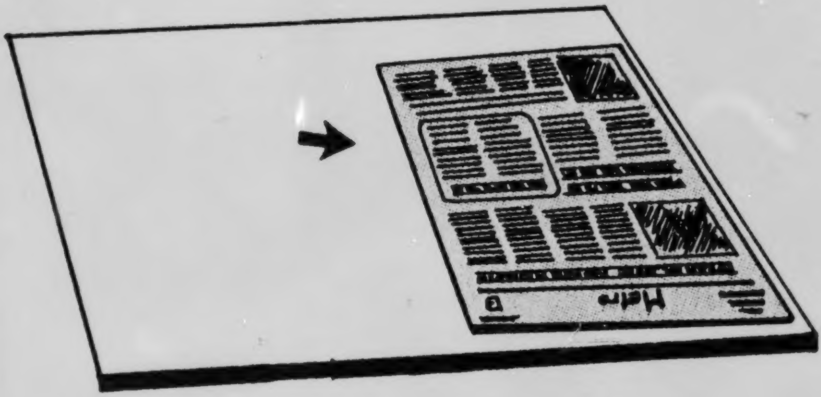
JOB STEPS

1. ASK YOUR INSTRUCTOR FOR 3 ELECTROSTATIC MASTERS.

2. GET ABOUT 500 SHEETS OF 8 1/2" X 11" SCRAP PAPER (6 TO 7 CM PILE). TRY TO GET SCRAP WITH 1 BLANK SIDE.

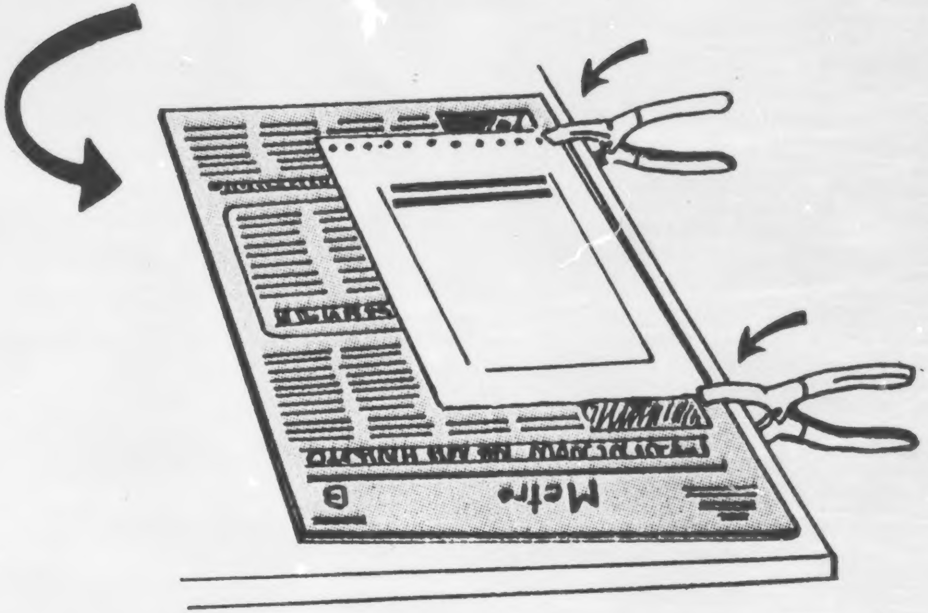
3. SET UP PRESS FOR PRINTING.

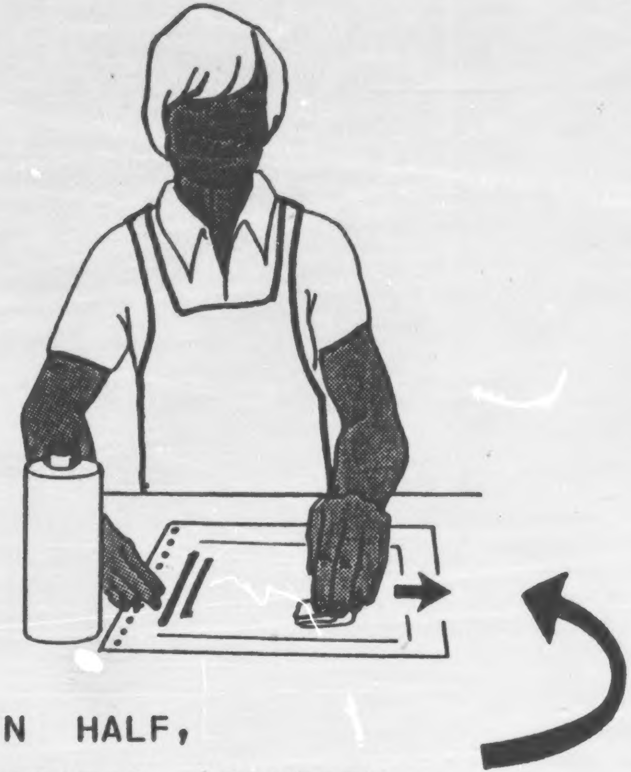
4. SPREAD A NEWSPAPER SECTION ON THE TABLE.



JOB STEPS

5. CLAMP THE FIRST ELECTROSTATIC MASTER TO THE TABLE.

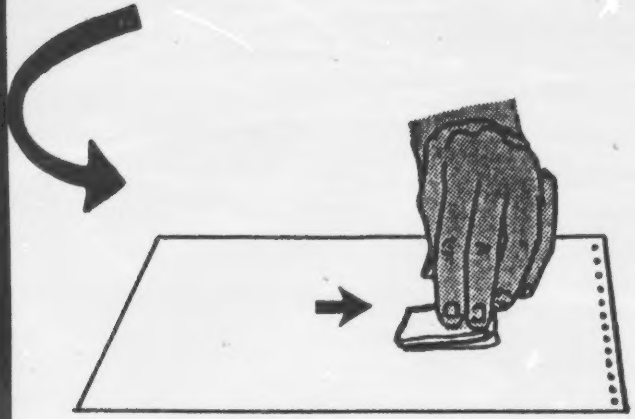


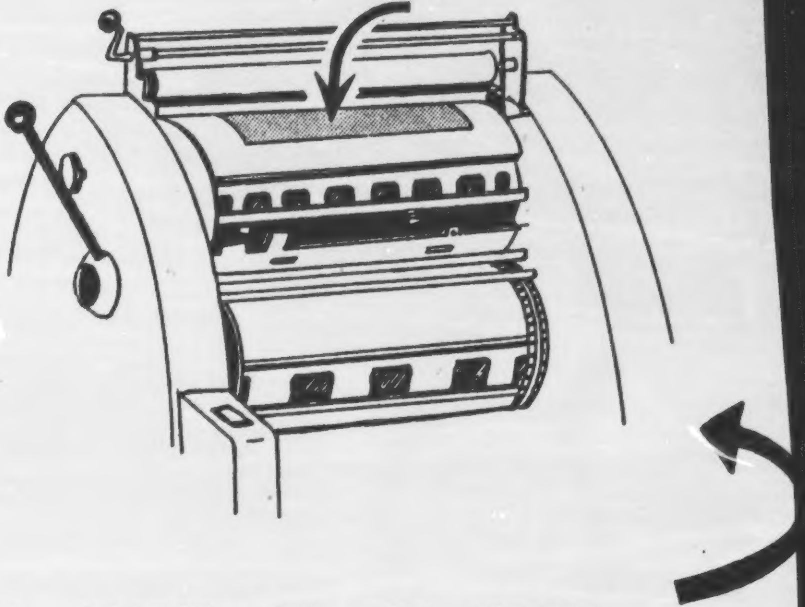


6. USING A COTTON PAD FOLDED IN HALF, COAT THE MASTER WITH ELECTROSTATIC SOLUTION. WIPE IT IN ONE DIRECTION UNTIL THE WHOLE PLATE IS COATED.

JOB STEPS

7. WIPE THE PLATE AGAIN IN A DIFFERENT DIRECTION. BE SURE THE PLATE IS COATED WELL BECAUSE ANY SPOTS YOU MISS WILL PICK UP INK AND CANNOT BE FIXED LATER.





8. PUT THE ELECTROSTATIC MASTER ON THE PRESS (IN THE STRAIGHT-EDGE CLAMP).

JOB STEPS

9. START THE PRESS RIGHT AWAY. THEN, DROP THE ROLLERS ONTO THE MASTER WITHIN 2 TURNS OF THE PLATE CYLINDER. LET THE TAIL FLOP BECAUSE IT IS TOO SHORT TO PUT INTO THE TAIL CLAMP.

10. GET THE POSITION SET UP AS FAST AS YOU CAN. IF THE MASTER DRIES OUT FOR 30 SECONDS OR MORE, RE-ETCH IT WITH ELECTROSTATIC SOLUTION.

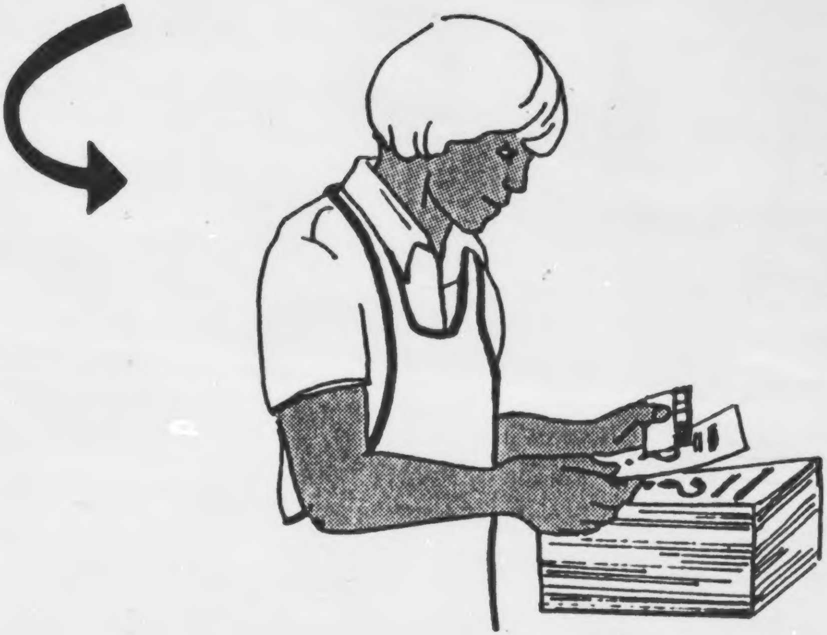
11. PRINT 100 COPIES FROM THE ELECTROSTATIC MASTER. WATCH THE IMAGE AND BACKGROUND AREAS AND LOOK FOR TONING OR SCUMMING. IF NECESSARY, ADD JUST THE WATER OR INK. ALSO, WATCH THE LEAD EDGE OF THE MASTER FOR TONING.

12. WHEN YOU ARE DONE PRINTING THE 100 COPIES, TAKE THE MASTER OFF THE PRESS.

13. CLEAN THE BLANKET.

JOB STEPS

14. CHECK YOUR WORK UNDER A BRIGHT WHITE LIGHT. LOOK AT PAGES FROM THE BEGINNING, MIDDLE AND END OF THE RUN. CHECK FOR TONING, TRACKING AND FOR A SOLID BLACK IMAGE (IT IS DIFFICULT TO GET A SOLID BLACK IMAGE FROM AN ELECTROSTATIC PLATE. COMPARE THE PRINTED PAGES TO THE MASTER).



JOB STEPS

15. REPEAT JOB STEPS 5 - 14 FOR THE SECOND ELECTROSTATIC MASTER.

16. REPEAT JOB STEPS 5 - 14 FOR THE THIRD ELECTROSTATIC MASTER. THIS TIME, TURN THE WATER SETTING DOWN HALF RIGHT AWAY. RUN 50 COPIES. TURN THE WATER BACK UP TO NORMAL.

17. GET A DIRECT IMAGE PAPER MASTER. IF YOU HAVE DONE MOD 1401 12 008 7, (MAKING DIRECT IMAGE PAPER MASTERS), MAKE A PAPER MASTER. IF NOT, ASK YOUR INSTRUCTOR TO HELP YOU. MAKE THE MASTER LIKE THIS:

    A - USE A LARGE, BOLD, PERMANENT BLACK MARKER AND DRAW A 7 1/2" X 10" BOX INSIDE THE 8 1/2" X 11" GUIDELINES ON THE MASTER. CENTER THE BOX.

JOB STEPS

B - USE A TYPEWRITER (WITH THE RIGHT RIBBON AND TYPE) AT LEAST 10 LINES INSIDE THE BOX.

C - DRAW SOMETHING WITH A REPRO. PENCIL.

18. PUT THE DIRECT IMAGE PAPER MASTER ON THE NEWSPAPER YOU USED BEFORE.

19. CLAMP DOWN THE NEWSPAPER AND THE PLATE TO THE TABLE.

20. USE PAPER PLATE ETCH AND A 1/2 FOLDED COTTON PAD AND ETCH THE PLATE IN 1 DIRECTION. THEN, ETCH IT AGAIN IN A DIFFERENT DIRECTION.

21. PUT THE PAPER PLATE ON THE PRESS.

JOB STEPS

22. START THE PRESS RIGHT AWAY. IF THE PLATE DRIES OUT IN MORE THAN 30 SECONDS, RE-WET IT WITH FOUNTAIN SOLUTION.

23. QUICKLY CENTER THE 7 1/2" X 10" BOX ON THE PAPER SO THE PLATE DOES NOT DRY OUT.

24. PRINT 100 COPIES.

25. WHEN YOU ARE DONE PRINTING THE 100 COPIES, TAKE THE PLATE OFF THE PRESS.

26. CLEAN THE MASTER WITH CLEANER-CONDITIONER. GUM IT WITH PAPER PLATE GUM.

27. CHECK YOUR JOB (LIKE YOU DID IN JOB STEP 13). THE SOLID AREAS SHOULD BE DARK AND THE LINES SHOULD BE UNIFORM. THE TYPING SHOULD BE SHARP AND CLEAN AND THE BACKGROUND SHOULD BE WHITE.

JOB STEPS

28. USE PAPER PLATE ETCH TO ETCH THE MASTER YOU JUST PRINTED. THIS TAKES THE GUM OFF THE PLATE.

29. PUT THE PLATE BACK ON THE PRESS.

30. RUN THE PRESS. RAISE THE WATER SETTING TO TWICE WHAT IS NORMAL.

31. PRINT 50 COPIES.

32. WHILE PRESS RUNS, TURN WATER SETTING TO HALF OF THE USUAL SETTING.

33. PRINT THE REST OF THE STOCK.

34. WHEN YOU ARE DONE PRINTING, TAKE THE PLATE OFF THE PRESS.

TURN PAGE →

JOB STEPS

35. USE THE CLEANER-CONDITIONER AND THE PAPER PLATE GUM ON THE PLATE.

36. CHECK YOUR WORK UNDER THE BRIGHT WHITE LIGHT. LOOK AT PRINTING RESULTS OF HAVING TURNED THE WATER UP AND DOWN. USE THE GRAY SCALE TO COMPARE THE IMAGE.

37. ASK YOUR INSTRUCTOR TO CHECK YOUR WORK. ASK HOW TO CHECK THE INK BY THE "SMEAR METHOD". POINT OUT MISTAKES AND DEFECTS.

38. NOW YOU KNOW HOW TO PRINT ELECTROSTATIC AND DIRECT IMAGE PAPER MASTERS ON THE OFFSET PRESS.

graphics

unit: FINISHING AND BINDING

capital area career center

module: 1401 14 004 7 date: 2/77 level: III

skill title: HOW TO USE A HAND NUMBERING MACHINE

developed & written by: GLEN PETTIT AND DWIGHT SMITH

visuals by: GLEN COOLEY

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO USE A HAND NUMBERING MACHINE.

AND IN ORDER TO DO THIS YOU WILL NEED:

A HAND NUMBERING MACHINE
PENCIL OR PEN
PLASTIC SETTING STICK
SCRAP PAPER
LINED PAPER

WORD GUIDE

SEQUENCE - ONE NUMBER FOLLOWS ANOTHER LIKE 1, 2, 3, 4, 5, 6, 7, 8, 9; OR SETS OF NUMBERS FOLLOWING OTHER SETS LIKE, 1 1 1, 2 2 2, 3 3 3.

WE WILL KNOW YOU CAN DO IT WHEN:

YOU CAN USE A HAND NUMBERING MACHINE AND YOUR WORK MEETS THESE MINIMUM REQUIREMENTS:

1. THE REQUESTED SEQUENCE IS 100% ACCURATE.
2. THE NUMBERS ARE WITHIN 2MM OF EXACT POSITION.
3. THE NUMBERS PRINT CLEARLY AND ARE NOT SMEARED OR OVER-INKED.

A TAPE OF THIS MODULE IS AVAILABLE

INFORMATION	MATERIALS	LOCATION OF MATERIALS
MANY TYPES OF PRINTED FORMS ARE NUMBERED. BUSINESS USE INVOICES, REPAIR ORDERS, CHECKS, RECEIPTS, ETC. THEY KEEP THESE FORMS TO CHECK ON LATER, AND NEED GOOD NUMBERING TO KEEP TRACK OF THEM. IF ONE OF THESE FORMS HAS MORE THAN ONE SHEET, A NUMBERING MACHINE CAN PRINT THE SAME NUMBER ON ALL THE SHEETS.		

WORD GUIDE

PLATEN PRESS - ALSO CALLED LETTERPRESS, USES LEAD TYPE TO PRINT.

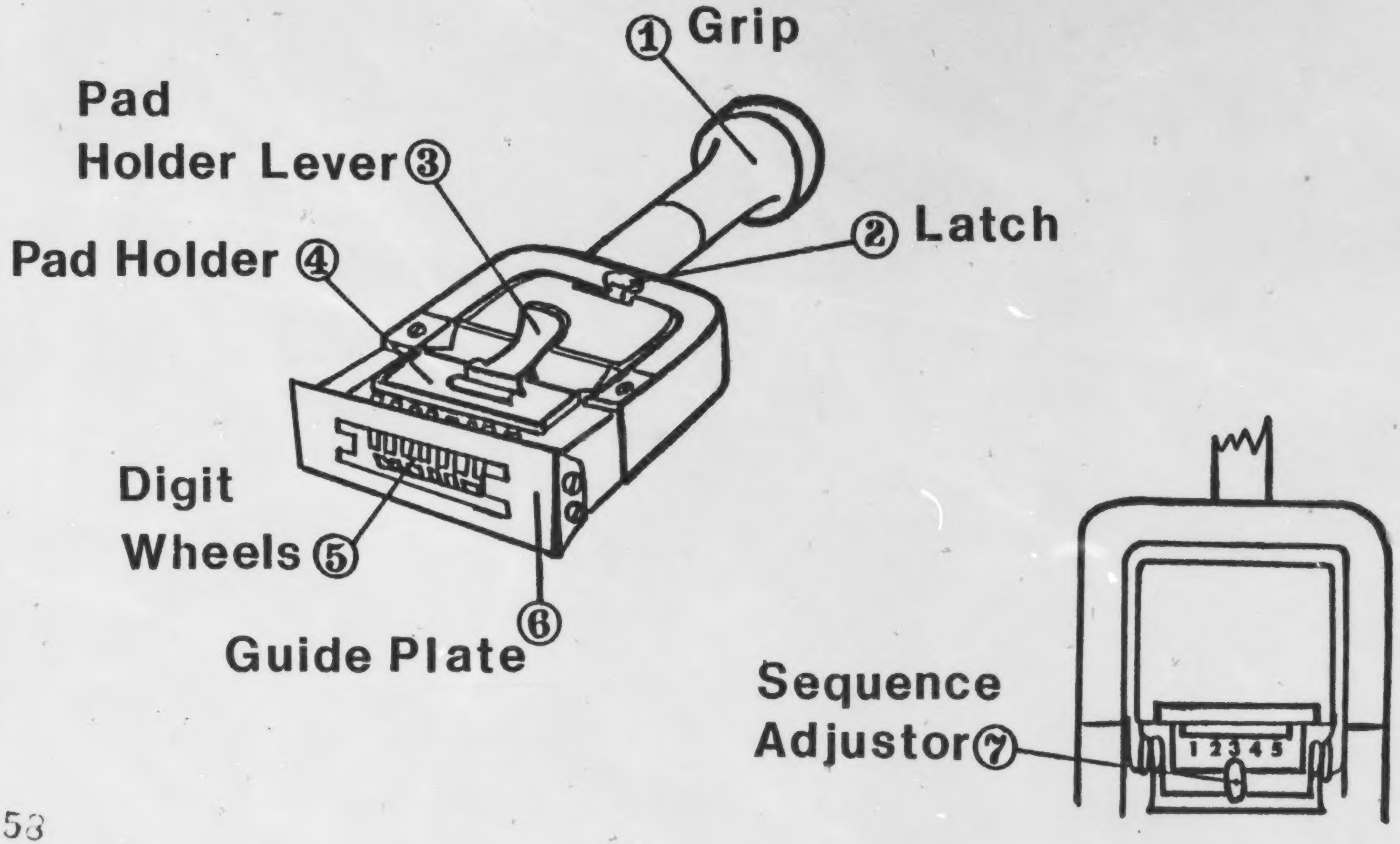
OFFSET PRESS - PRINTS WITH PLATES, ALSO CALLED LITHO PRINTING.

INFORMATION	MATERIALS	LOCATION OF MATERIALS
YOU WILL USE A HAND NUMBERING MACHINE. THERE ARE NUMBERING MACHINES THAT CAN FIT INSIDE A PLATEN PRESS. OTHERS CAN BE USED ON AN OFFSET PRESS. THESE MACHINES CAN NUMBER FORWARD OR BACKWARD. THEY CAN PRINT ONE NUMBER OR MANY NUMBERS IN SEQUENCE.		

INFORMATION	MATERIALS	LOCATION OF MATERIALS
THE HAND NUMBERING MACHINE HAS 6 SETTINGS. THE SETTINGS ARE: 0 (REPEATS) 1 1 1 1 1 1 1 1 1 1 (SEQUENCE) 1 2 3 4 5 6 7 8 9 2 (DUPLICATE) 1 1 2 2 3 3 4 4 3 (TRIPLICATE) 111 222 333 444 555 4 (QUADRUPLICATE) 1111 2222 3333 4444 6 (6 TIMES) 111111 222222 333333		

JOB STEPS

1. GET THE HAND NUMBERING MACHINE. FIND THE PARTS.


① Grip
Pad Holder Lever ③
② Latch
Pad Holder ④
Digit Wheels ⑤
⑥ Guide Plate
Sequence Adjustor ⑦
1 2 3 4 5

WORD GUIDE

IMPRESSIONS - PRINTING CYCLE; EACH TIME YOU PRINT IS AN IMPRESSION.

DIGIT WHEELS - WHERE THE NUMBERS ARE YOU PRINT WITH.

JOB STEPS

2. GET A PAD OR 5 TO 6 PIECES OF SCRAP PAPER. PUT THE MACHINE ON TOP OF THE PAPER WITH THE GRIP UP. PUSH THE LATCH IN TO RELEASE THE DIGIT WHEELS. PUSH DOWN ON THE GRIP 4 OR 5 TIMES AND NOTICE THE NUMBER CHANGES BY ITSELF.

3. PUSH THE SEQUENCE ADJUSTOR IN AND MOVE IT TO THE 3 MARK. PRINT THE NUMBERS AT LEAST 12 TIMES, WHILE MOVING THE MACHINE BETWEEN IMPRESSIONS. IT WILL CHANGE EVERY THREE TIMES YOU PRINT WITH IT. THIS IS CALLED TRIPLICATE NUMBERING.

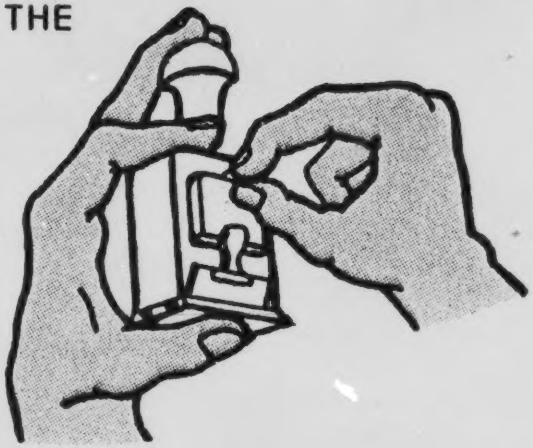
JOB STEPS

4. MOVE THE SEQUENCE ADJUSTOR TO THE 1. PRINT 12 IMPRESSIONS. THE NUMBER WILL CHANGE EACH TIME. THIS IS CALLED CONSECUTIVE NUMBERING.

5. RESET THE NUMBERS (DIGIT WHEELS) TO 000000, LIKE THIS:

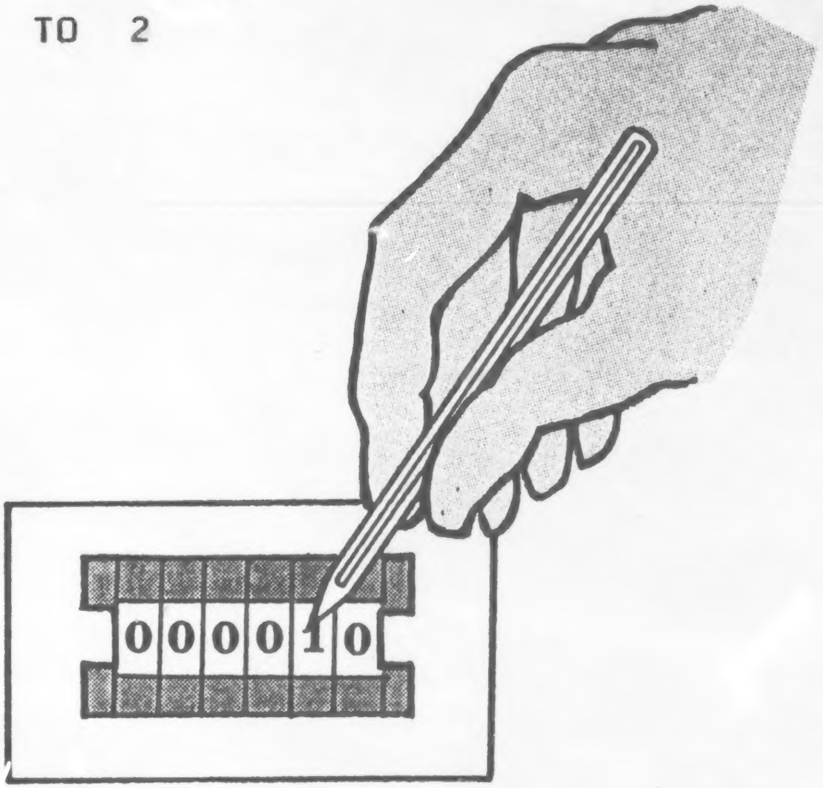
   A. PUSH THE GRIP ALL THE WAY DOWN.

   B. SLIDE THE LATCH TO LOCK THE DIGIT WHEELS IN PLACE.



JOB STEPS

TURN EACH DIGIT WHEEL TO THE NUMBER YOU NEED TO START WITH. USE THE PLASTIC SETTING STICK OR A BALL POINT PEN. MOVE THE NUMBERS FROM 1 TO 2 TO 3 ETC.



JOB STEPS

6. PRINT FROM 000000 TO 000012. NOTICE THE EXTRA O'S. TO GET RID OF THEM YOU MUST "SINK" OR LOWER THEM SO THEY DO NOT PRINT. FOLLOW THESE STEPS ON ALL O'S.

   A. PUSH THE GRIP ALL THE WAY DOWN.

   B. SLIDE THE LATCH TO LOCK THE DIGIT WHEELS IN PLACE.

   C. TURN THE DIGIT WHEEL TO 0.

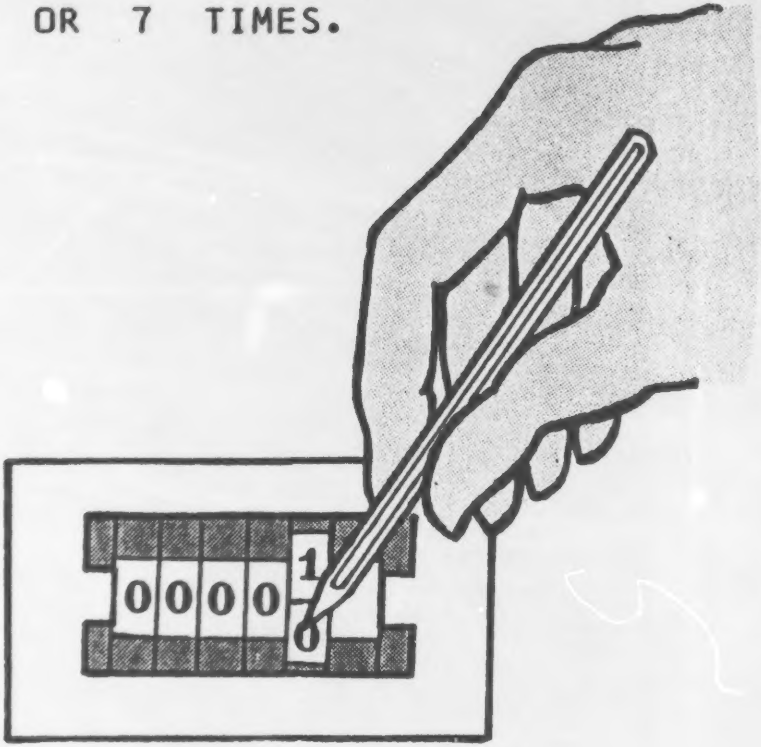
   D. SLOWLY TURN THE DIGIT WHEEL TOWARD 1 WHILE PUSHING DOWN ON THE DIGIT WHEEL.

→

JOB STEPS

E. THE 0 WILL "SINK" OUT OF PLACE AND WILL NOT PRINT.

F. PRINT WITH IT 6 OR 7 TIMES.



WORD GUIDE

BROKEN - NOT COMPLETELY PRINTING.

JOB STEPS

7. CHECK THE QUALITY OF THE NUMBERS YOU ARE PRINTING. IF THEY ARE FUZZY AND BLACK, IT MEANS THERE IS TOO MUCH INK ON THE PAD. IF THEY ARE GRAY OR BROKEN THERE IS NOT ENOUGH INK ON THE PAD. INSPECT THE NUMBERS YOU HAVE PRINTED. ARE THEY GOOD QUALITY?

8. THE NUMBERING MACHINE DOES NOT NEED INKING VERY OFTEN. IF YOU THINK IT NEEDS INKING, ASK YOUR INSTRUCTOR TO CHECK IT. IF IT DOES NEED TO BE INKED, DO IT LIKE THIS:

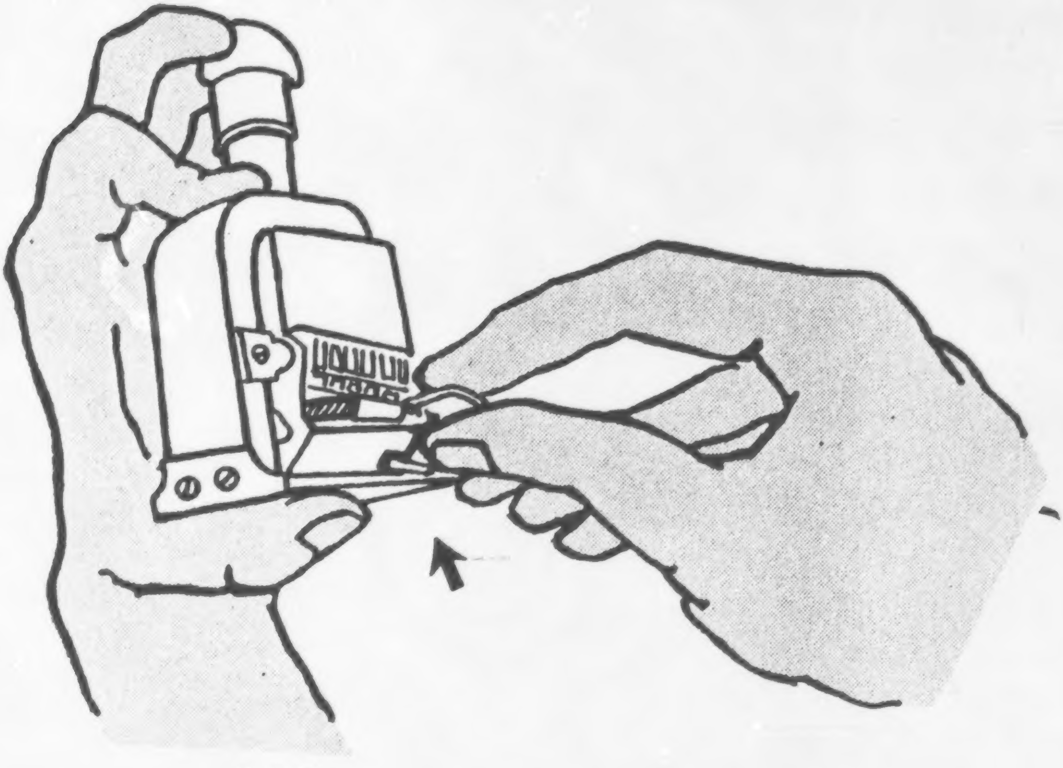
    A. PUSH THE GRIP DOWN ENOUGH TO SHOW THE PAD (3-5MM).

JOB STEPS

B. SQUEEZE THE PAD HOLDER LEVER.

C. CAREFULLY PULL THE INK PAD OUT.

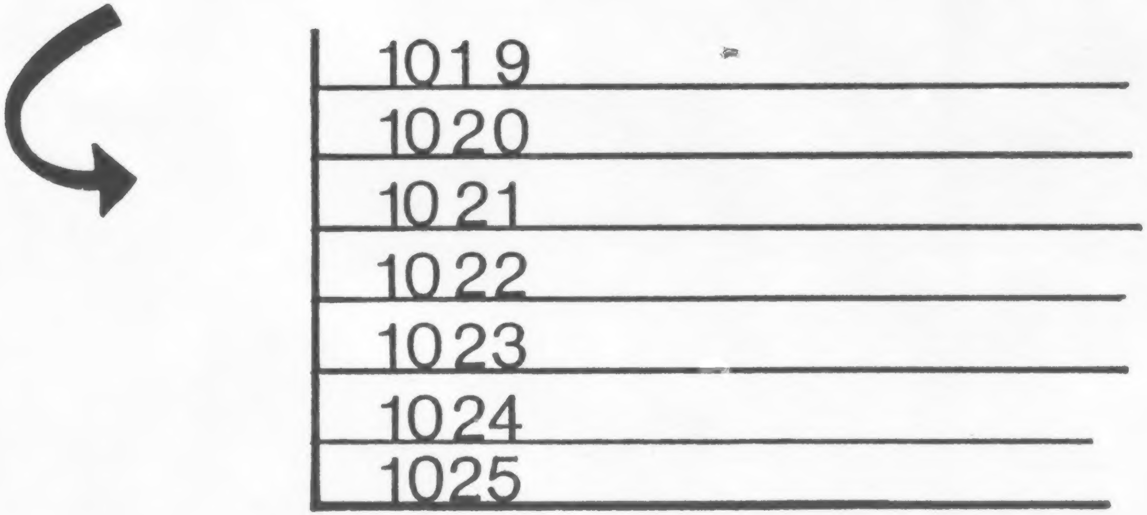
D. SPREAD OUT 2 OR 3 DROPS OF SPECIAL INK ON THE PAD AND PUT THE PAD BACK IN THE MACHINE.



JOB STEPS

9. THE GUIDE PLATE ON THE BOTTOM OF THE MACHINE IS TO HELP YOU PRINT THE NUMBER IN THE EXACT PLACE THEY SHOULD GO. DRAW SOME GUIDE LINES AND PRACTICE PRINTING THE NUMBERS EXACTLY WHERE YOU WANT THEM.

10. GET A SHEET OF LINED PAPER. PRINT IT FROM 1001 TO 1025. START AT THE TOP OF THE PAPER AND GO DOWN. DO IT AGAIN IN TRIPLICATE, WITH EACH COLUMN THE SAME. PRACTICE UNTIL YOU MEET THE REQUIREMENTS ON PAGE 3. THE NUMBERS MUST ALL JUST TOUCH THE LINE.



JOB STEPS

11. WHEN YOU HAVE MET THE REQUIREMENTS FOR GOOD NUMBERING, SHOW THE ASSIGNMENT TO YOUR INSTRUCTOR. BRING THE NUMBERING MACHINE WITH YOU, AND BE READY TO ANSWER SOME QUESTIONS ABOUT IT.

graphics

unit: SPECIAL PROCESSES

capital area career center

module: 1401 15 003 7 **date:** 5/74 **level:**

skill title: EMBOSSING WITH VIRKOTYPE POWDER

developed & written by: GLEN PETTIT

visuals by: MIKE SMITH

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO DUST A FRESHLY PRINTED SHEET WITH VIRKOTYPE POWDER AND PASS IT THROUGH A HEAT CHAMBER TO PRODUCE THERMOGRAPHIC RAISED PRINTING.

IN ORDER TO DO THIS YOU WILL NEED:

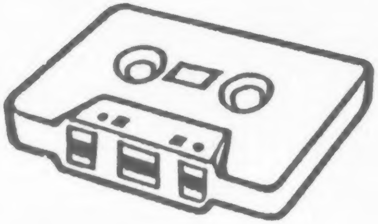
VIRKOTYPE POWDER
A HEAT SOURCE
PRINTED STOCK
A BOX
EMBOSSING MACHINE

WE WILL KNOW YOU CAN DO IT WHEN:

1. THE FINAL THERMOGRAPHIC PRINTING IS RAISED, CLEAN, AND SOLID, AND THE AREA AROUND IT IS FREE OF EXCESS DUST OR POWDER.

2. THE STOCK IS FLAT, WITHOUT ANY BROWN OR BURN STAINS.

3. THE FINAL PRINTING IS UNIFORM, WITHOUT RUN, YELLOWING, AND FLATNESS, AND IT FEELS SMOOTH, NOT DRY OR POWDERY.



A TAPE OF THIS MODULE IS AVAILABLE.

WORD GUIDE

EMBOSSING - RAISING SOMETHING FROM A SURFACE.

INFORMATION

VIRKOTYPE IS "FAKE EMBOSSING" AND IS DONE BY DUSTING A FRESHLY PRINTED SHEET WITH A POWDER, REMOVING THE EXCESS AND APPLYING HEAT TO THE PAPER TO "MELT" THE POWDER.

MOST WEDDING INVITATIONS AND MOST FORMAL PRINTING IS EMBOSSED. THE QUALITY WAY TO EMBOSS IS WITH A STEEL ENGRAVING (LETTERPRESS PRINTING ONLY; REQUIRES A MALE AND A FEMALE DIE OF THE TYPE WHICH MUST BE PERFECT REGISTER). ENGRAVING A TYPICAL WEDDING INVITATION, FOR EXAMPLE, WOULD COST ABOUT $80.00 FOR 100 INVITATIONS AND MUST BE DONE AT A LARGE TRADE SHOP, LIKE ONE IN CHICAGO. THE SAME INVITATIONS COULD BE DONE IN LANSING FOR LESS THAN $20.00 - IF THERMOGRAPHIC (VIRKOTYPE). MOST PEOPLE COULD NOT TELL OR FEEL THE DIFFERENCE.

INFORMATION

THE ENGRAVED STEEL DIE WILL ACTUALLY EMBOSS UP THE PAPER WHEN YOU FEEL THE RAISED IMAGE, YOU ARE ACTUALLY FEELING THE RAISED PAPER. THERE WILL BE A SLIGHT INDENTION VISIBLE FROM THE BACK OF THE PAPER WHERE THE MALE DIE FORCED THE PAPER INTO THE FEMALE DIE. ENGRAVING IS A SIGN OF EXPENSIVE, QUALITY PRINTING.

VIRKOTYPE OR THERMOGRAPHY LOOKS AND FEELS IDENTICAL TO ENGRAVING, FROM THE FRONT, BUT COSTS ONLY A FRACTION OF WHAT ACTUAL ENGRAVING WOULD. A THERMOGRAPHIC POWDER (VIRKOTYPE IS MOST COMMON BRAND; "ROSIN" WILL ALSO WORK) IS DUSTED ON THE STILL WET INK. ALL EXCESS POWDER IS REMOVED AND HEAT IS THEN APPLIED TO THE DUSTED SHEET (LONG ENOUGH TO MELT THE POWDER, WHICH MIXES WITH THE INK AND HARDENS QUICKLY WHEN COOLED).

WORD GUIDE

COARSE - HARD, ROUGH.

INFORMATION

THE CLEAR, VIRKOTYPE POWDER (YELLOWISH) TAKES ON WHATEVER COLOR INK IT STICKS TO AND ALSO DRIES THE INK IMMEDIATELY, WHEN HEATED. A GLOSS POWDER IS VERY BRIGHT AND REFLECTIVE WHILE THE DULL POWDER IS FLATTER AND DULL. VIRKOTYPE POWDER ALSO COMES IN GOLD AND SILVER (BRASS CHIPS OR ALUMINUM CHIPS ARE ADDED) BUT THESE ARE VERY COARSE AND ONLY LOOK BEST ON VERY LARGE SOLIDS OR BOLD TYPE.

VIRKOTYPE POWDER COSTS ABOUT $12/LB., WHICH MAY DO 5,000 AVERAGE WEDDING INVITATIONS (A POUND IS ABOUT THE SAME VOLUME AS A QUART).

ALMOST ANYTHING THAT FURNISHES HEAT MAY BE USED TO HEAT THE PAPER: A MATCH, LIGHT BULB, OVEN, SUN LAMP, ETC. (YOU CAN USE A SPECIAL HEAT TUNNEL OR THE SHRINK WRAP TUNNEL THOUGH IT IS SLOW).

INFORMATION

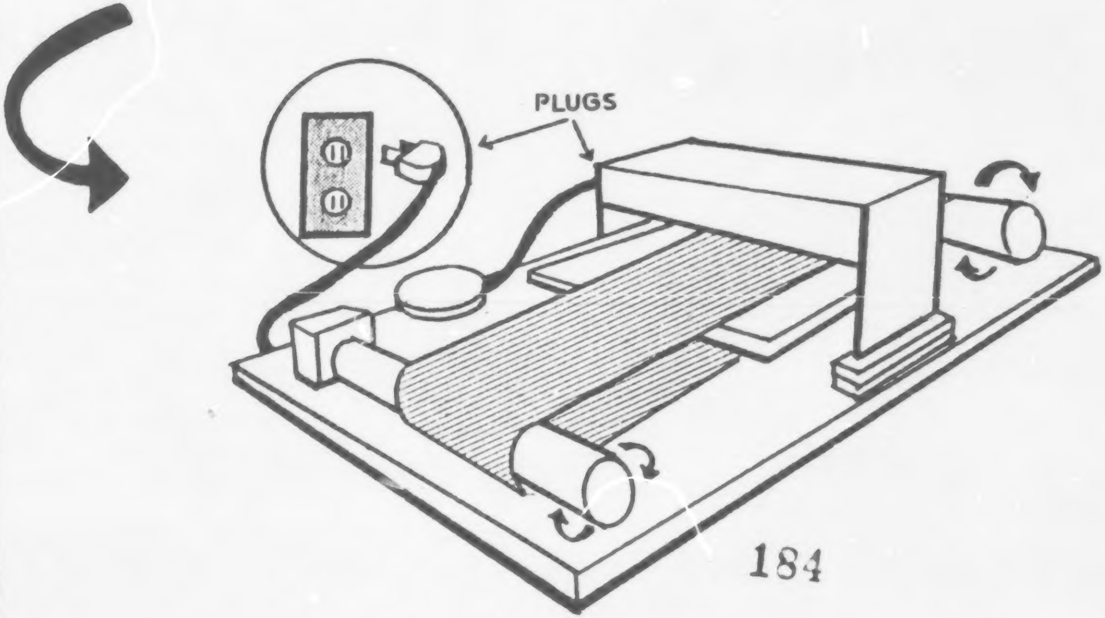
NOTE: THICK PAPER, LIKE POSTERBOARD, REQUIRE A LOT OF HEAT. IF YOU HAVE ONLY A FEW TO DO, USE A MATCH OR BULB. BE CAREFUL NOT TO BURN YOUR PAPER. ALLOW SUFFICIENT TIME FOR YOUR UNIT TO COOL BEFORE PUTTING IT AWAY. VIRKOTYPE POWDER IS VERY LIGHT SO BE CAREFUL TO AVOID "BLOWING" EXCESS DUST AROUND. GENTLY POUR EXCESS DUST FORM THE BOX OR PAPER BACK INTO THE CONTAINER (REMEMBER: $1.00 PER OUNCE).

JOB STEPS

1. TAKE ALL EQUIPMENT AND MATERIALS TO YOUR WORK AREA.

2. GET SOME FRESHLY PRINTED STOCK READY FOR EMBOSSING (SHOULD BE THERMOGRAPHED WITHIN 10-15 MINUTES).

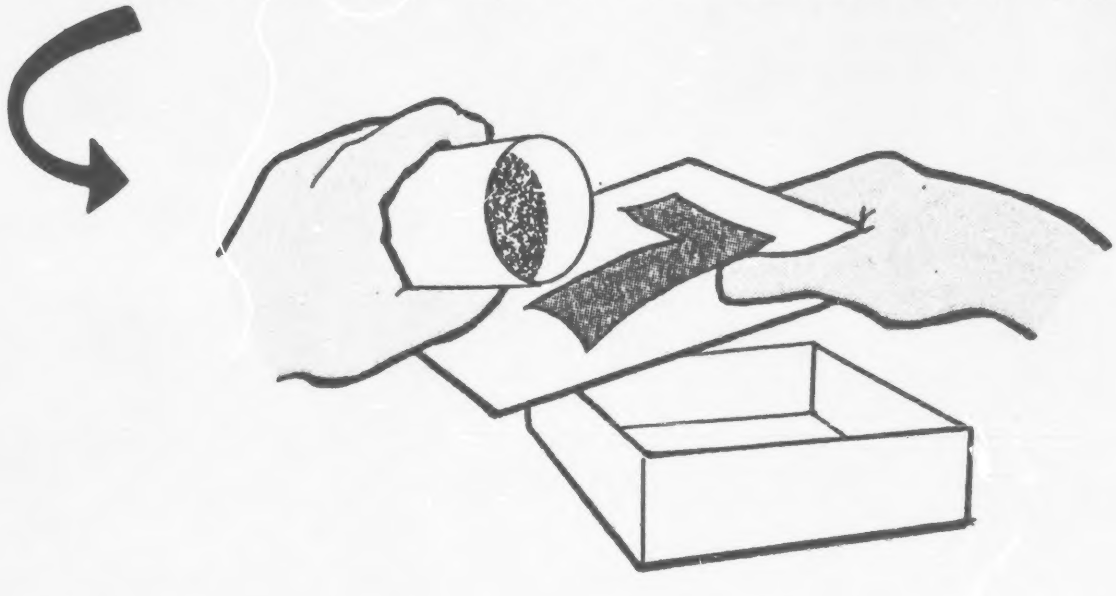
3. PRE-HEAT THE EMBOSSING MACHINE AND BE SURE THE ROLLERS ARE TURNING.



JOB STEPS

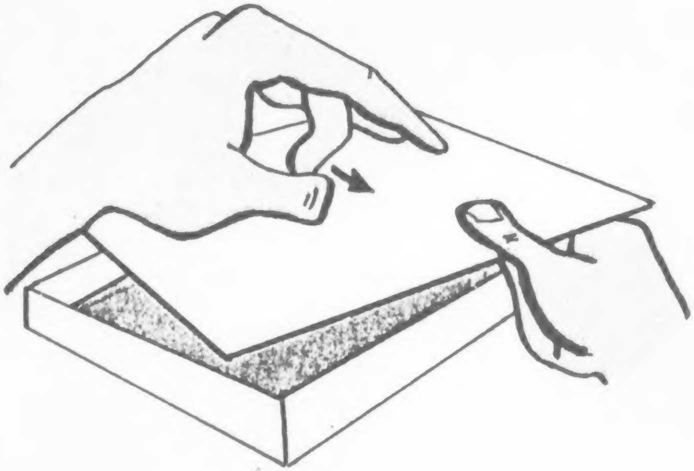
4. GET THE VIRKOTYPE POWDER (CLEAR IS LIGHT YELLOW IN COLOR). GET A SMALL BOX OR LARGE SHEET OF PAPER FOR COLLECTING EXCESS POWDER.

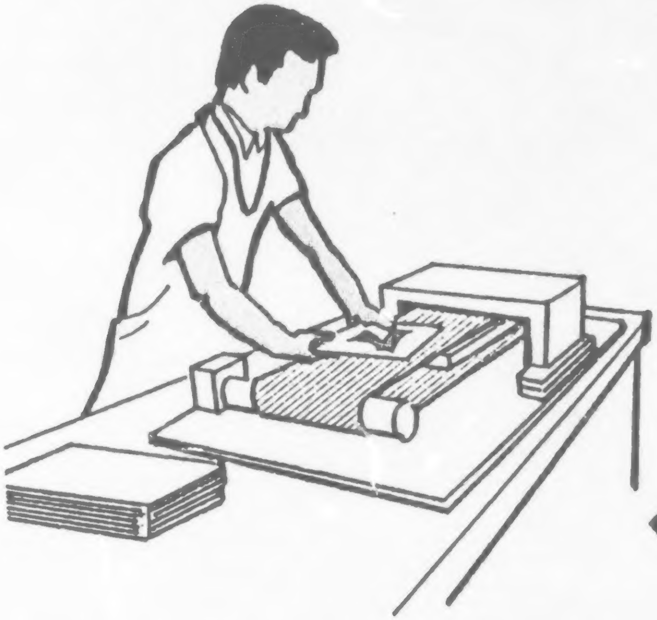
5. POUR ENOUGH VIRKOTYPE POWDER ON THE WET INK TO COVER ALL THE PRINTING. THEN, GENTLY SHAKE THE STOCK TO ADHERE THE POWDER.



JOB STEPS

6. TURN THE STOCK OVER AND "SNAP" THE BACK OF IT WITH YOUR FINGER TO REMOVE ALL EXCESS POWDER.

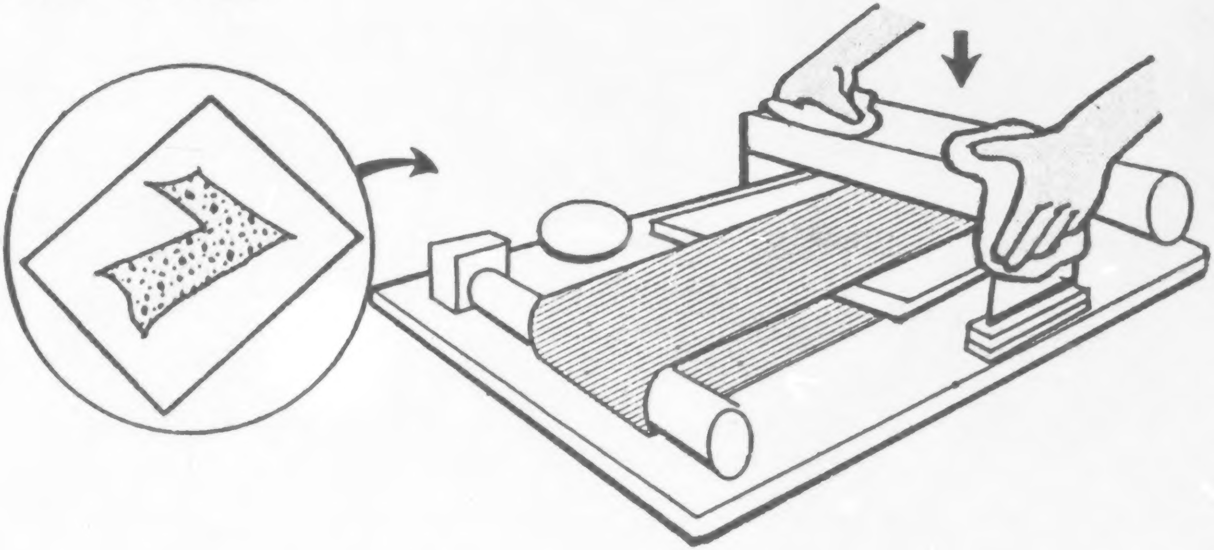




7. PLACE THE DUSTED STOCK ON THE CONVEYOR BELT - FACE UP - AND LET IT RUN THROUGH. YOU SHOULD HAVE A THREE-DIMENSIONAL, RAISED, PRINTED AREA.

JOB STEPS

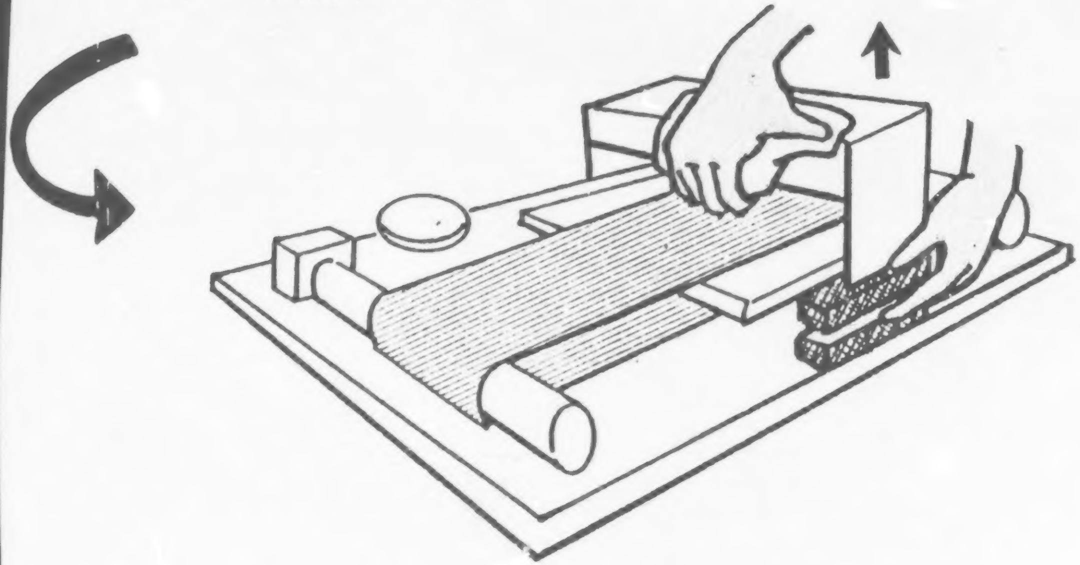
8. IF THE IMAGE AREA LOOKS PITTED AND ROUGH, RUN IT THROUGH AGAIN BECAUSE IT NEEDS MORE HEAT OR LOWER THE HEATING UNIT CLOSER TO THE STOCK.



9. IF THE IMAGE IS FLAT, RUN TOGETHER AND YELLOWISH, IT HAS TOO MUCH HEAT. RAISE THE HEATING UNIT AWAY FROM THE BELTS USING PIECES OF WOOD FURNITURE. IF THERE ARE LITTLE →

JOB STEPS

9. SPECKS OF YELLOW ON THE STOCK (EXCESS VIRKOTYPE POWDER), "SNAP" THE STOCK HARDER TO REMOVE IT.



10. VIRKOTYPE YOUR JOB.

11. CHECK YOUR WORK AREA CAREFULLY, ESPECIALLY FOR EXCESS VIRKOTYPE POWDER.

graphics

unit: PHOTOGRAPHY (CONTINUOUS TONE)

capital area career center

module: 1401 16 002 7 **date:** 8/77 **level:**

skill title: PHOTOGRAPHY WITH A PIN-HOLE CAMERA

developed & written by: JERRY REIMER

visuals by: LAURA EIBACH

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

1. HOW TO LOAD FILM INTO A PIN-HOLE CAMERA;
2. HOW TO CORRECTLY EXPOSE THE FILM;
3. HOW TO REMOVE AND PROCESS THE FILM TO GET THE NEGATIVE.

AND IN ORDER TO DO THIS YOU WILL NEED:

CONSTRUCTION MATERIALS

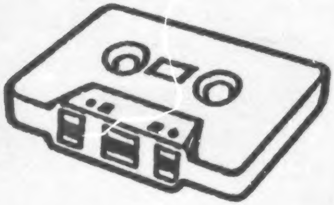
FILM

TOWEL

CHEMICALS FOR PROCESSING

WE WILL KNOW YOU CAN DO IT WHEN:

YOU CAN MAKE A CORRECTLY EXPOSED AND DEVELOPED NEGATIVE.



A TAPE OF THIS MODULE IS AVAILABLE

INFORMATION

AS MENTIONED IN THE FIRST PHOTOGRAPHY MODULE, FILM IS SENSITIVE TO LIGHT. IN THIS MODULE YOU WILL FIND OUT, FIRST-HAND, WHAT THE PROPERLY EXPOSED AND DEVELOPED NEGATIVE LOOKS LIKE. WE WILL START WITH THE PIECE OF FILM AND A PIN-HOLE CAMERA AND THEN WE WILL LOAD THE CAMERA (IN THE DARK). AFTER EXPOSING THE FILM, YOU WILL THEN RETURN TO THE DARKROOM AND PROCESS IT.

BEFORE GOING THROUGH THE JOB STEPS, YOU MAY WISH TO WATCH THE FILMSTRIP SERIES ON EXPOSURE, ENTITLED: EXPOSURE.

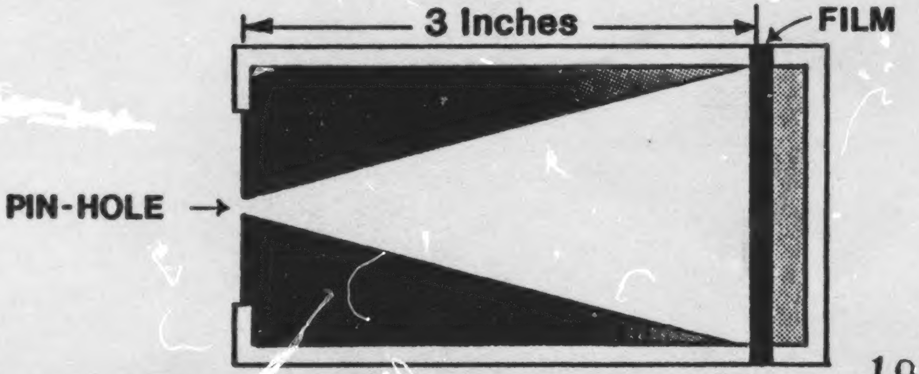
JOB STEPS

1. TAKE ALL EQUIPMENT AND MATERIAL TO YOUR WORK AREA.

2. ASK INSTRUCTOR FOR SOME SIMPLE PIN-HOLE CAMERAS.

3. USING ANY ONE OF THE EXAMPLES AS A MODEL, MAKE YOUR OWN PIN-HOLE CAMERA. IF NONE OF THE EXAMPLES APPEAL TO YOU, MAKE A CAMERA OF YOUR OWN DESIGN. THERE ARE A FEW THINGS TO REMEMBER HOWEVER;

   A. THE FILM MUST BE THREE INCHES FROM THE PIN-HOLE;

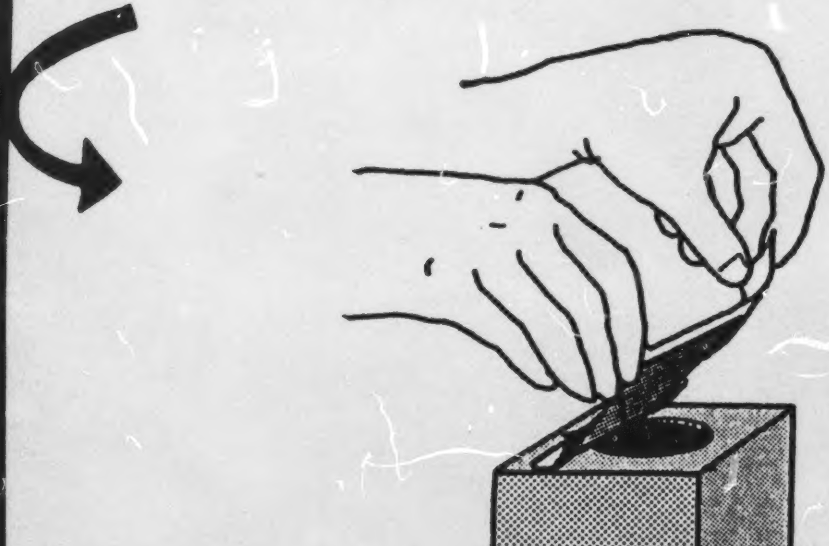


JOB STEPS

B. YOU MUST DEVISE SOME TYPE OF SHUTTER; AND

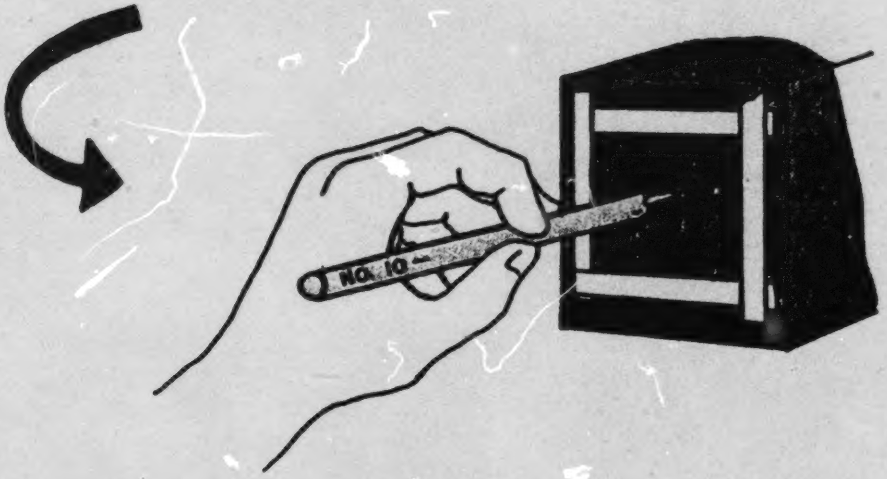
C. THE INSIDES MUST BE BLACK.

4. ATTACH THE METAL PLATE TO THE FRONT OF THE CAMERA. YOUR INSTRUCTOR WILL SUPPLY YOU WITH A METAL PLATE.



JOB STEPS

5. USING A #10 PEN, PIERCE THE CENTER OF THE METAL PLATE. THIS BECOMES THE APERTURE OF THE CAMERA.

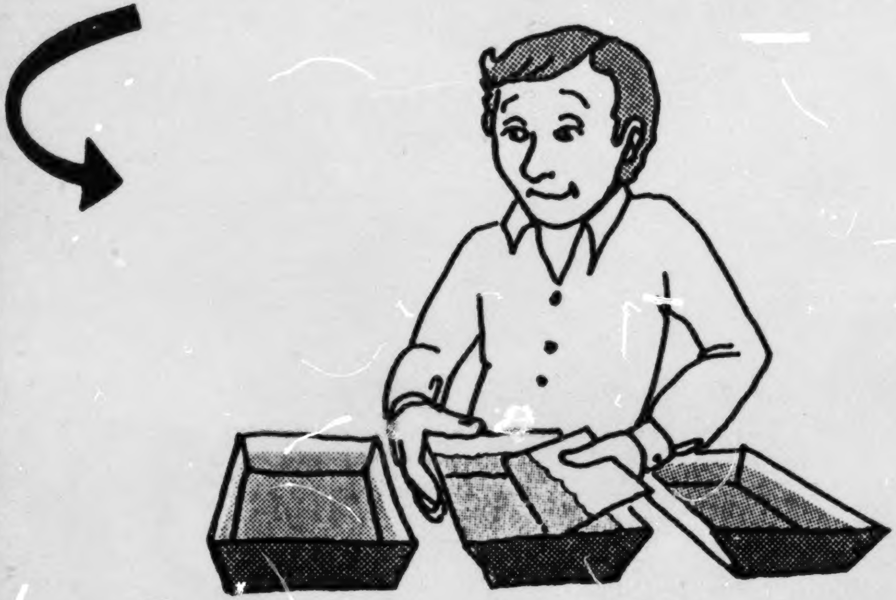


6. ONCE YOU HAVE COMPLETED THE CAMERA, ASK THE INSTRUCTOR FOR THE FILM. LOAD THE FILM IN COMPLETE DARKNESS.

7. FOLLOWING YOUR INSTRUCTOR'S RECOMMENDED EXPOSURE TIMES, EXPOSE THE FILM.

JOB STEPS

8. ASK THE INSTRUCTOR TO SHOW YOU HOW TO PROCESS THE FILM AND THEN, FOLLOWING INSTRUCTIONS, PROCESS THE FILM.



9. CLEAN UP THE AREA AND GO ON TO THE NEXT MODULE.

graphics

unit: PHOTOGRAPHY (CONTINOUS TONE)

capital area career center

module: 1401 16 007 7 **date:** 8/77 **level:**

skill title: CROPPING, MOUNTING, AND DISPLAY OF PRINTS

developed & written by: JERRY REIMER

visuals by: GLEN COOLEY

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

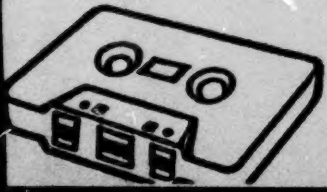
1. HOW TO CROP A PRINT TO ELIMINATE UNWANTED PARTS OF A PHOTOGRAPH.
2. HOW TO MOUNT AND DISPLAY THE FINISHED PRINT.

IN ORDER TO DO THIS YOU WILL NEED:

A PRINT WHICH YOU HAVE PROCESSED
MATBOARD OR POSTERBOARD
DRY MOUNT TISSUE

WE WILL KNOW YOU CAN DO IT WHEN:

YOU SHOW THE INSTRUCTOR A PRINT WHICH CROPPED, MOUNTED, AND DISPLAYED.



A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

A PRINT IS MOST ATTRACTIVE WHEN IT IS MOUNTED FOR DISPLAY ON A SUITABLE MOUNTING BOARD. THE PURPOSE OF THIS MODULE IS TO GIVE YOU THE INFORMATION NECESSARY TO CROP AND MOUNT THE PRINT TO MAKE IT LOOK BEST.

THERE ARE TWO WAYS TO CROP A PHOTOGRAPH. THE FIRST AND EASIEST: WHEN PRINTING, YOU CAN RAISE OR LOWER THE ENLARGER TO GET THE DESIRED IMAGE SIZE. YOU CAN ALSO ADJUST THE EASEL TO COMPOSE THE NEGATIVE IN A PLEASING ARRANGEMENT OF SUBJECT MATTER.

THE SECOND WAY TO CROP A PHOTOGRAPH (THE ONE WE WILL DEAL WITH HERE): CUT THE PRINT TO INCREASE OR DECREASE IMAGE SIZE (IN RELATIONSHIP TO THE FINAL PRINT SIZE). CROPPING AFTER THE PRINT IS PROCESSED ALSO MEANS THAT THE PRINT SIZE CAN BE ALTERED TO SOMETHING

INFORMATION

OTHER THAN 4 X 5, 5 X 7, 8 X 10, ETC.), THE PRINT WILL NOT FILL THE FRAME. ON THE OTHER HAND, IF YOU ARE TO FRAME A PHOTO IN A STANDARD SIZE FRAME (4 X 5, 5 X 7, 8 X 10, ETC.), THE PRINT WILL NOT FILL THE FRAME. ON THE OTHER HAND, IF YOU HAVE A LANDSCAPE, IT MAY COMPLIMENT YOUR PHOTO IF IT IS CUT TO EMPHASIZE THE HORIZONTAL FLOW OF THE LAND.

THE BEST WAY TO MOUNT A PHOTO IS TO ATTACH IT TO A STIFF BACKING. WITH A STIFF BACKING, THE PRINT CAN BE HUNG OR DISPLAYED MORE EASILY. IF THE MOUNTING BOARD (USUALLY MATBOARD) IS LARGER THAN THE PRINT, THE EXCESS FORMS A FRAME FOR THE PHOTO WHICH CAN DRAW ATTENTION TO THE PICTURE.

DISPLAYING A PRINT IS SIMPLY ARRANGING THE IMMEDIATE SURROUNDINGS TO ACCENT THE PRINT. THIS COULD BE ANYTHING FROM THE SIMPLEST TO THE MOST ELABORATE.

WORD GUIDE

ENHANCE - EMPHASIZE, TO MAKE MORE ATTRACTIVE.

INFORMATION

PLEASE VIEW THE FILMSTRIP TITLED "PRINT FINISHING". THEN, FOLLOW THE JOB STEPS AND FIND OUT HOW TO PREPARE YOUR FAVORITE PRINTS FOR DISPLAY.

DISPLAY IS THE NEXT STEP. IMAGINATION IS YOUR ONLY LIMIT HERE. THE DISPLAY WINDOW OR BULLETIN BOARD IS THERE TO EMPHASIZE YOUR PRINT, BUT JUST ONE MOUNTED PRINT IN ITSELF MAY NOT BE ENOUGH. YOU NEED TO DRAW THE VIEWER CLOSER TO THE PRINT. THIS IS DONE BY ATTENTION DEVICES. SOME EXAMPLES ARE: COLOR, CONTRAST, DESIGN, AND SIZE. KEEP IN MIND THE PRINT REMAINS THE SAME, BUT THE SURROUNDINGS CAN CHANGE. TRY TO KEEP IT SIMPLE AND DIRECT.

LIGHTING IS ANOTHER CONSIDERATION WHEN DISPLAYING YOUR PRINT. GOOD AND EVEN LIGHTING IS SUGGESTED TO ENHANCE THE PRINT.

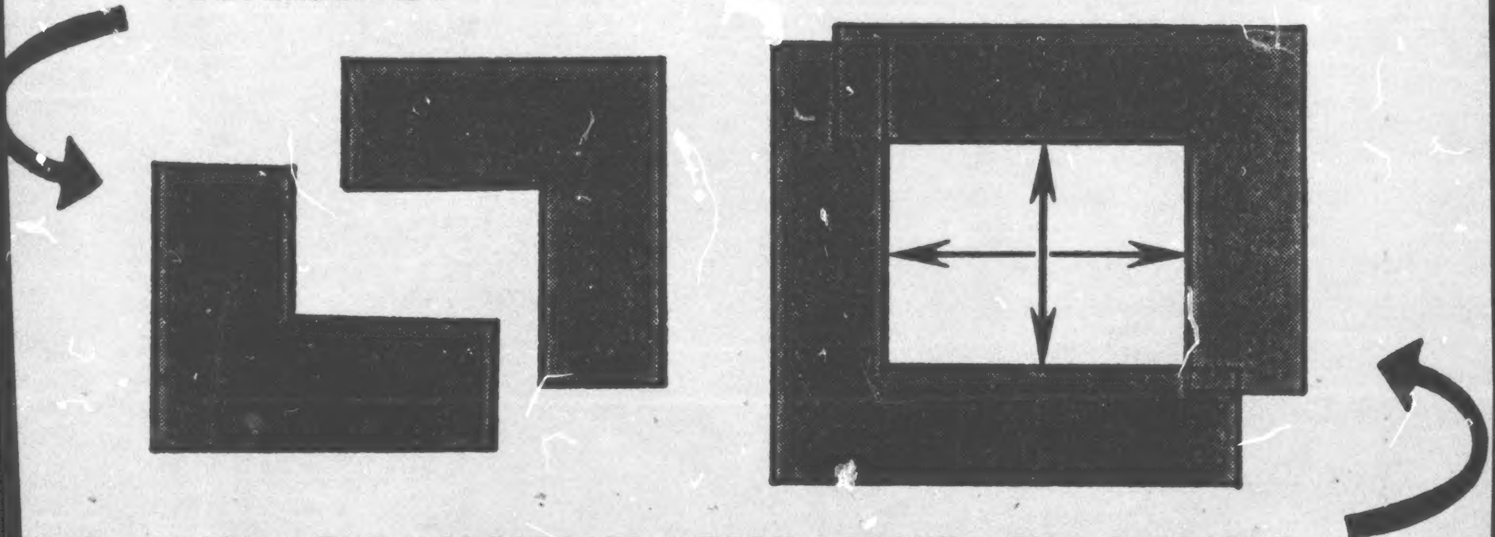
WORD GUIDE

VARIABLE - CHANGEABLE

JOB STEPS

1. TAKE ALL EQUIPMENT AND MATERIALS TO YOUR WORK AREA.

2. CUT TWO "L" SHAPED PIECES OF CARDBOARD OR POSTERBOARD.



3. WITH THE PROCESSED TEST PRINT ON A TABLE, ARRANGE THE "L" PIECES ON THE PRINT TO FORM A RECTANGLE OF VARIABLE SIZE. MOVE THE "L" PIECES TO INCLUDE OR LEAVE OFF PORTIONS OF THE SCENE.

JOB STEPS

NOTE: IF THE SUBJECT IS A PERSON, ALWAYS LEAVE MORE SPACE IN FRONT OF THE PERSON INSTEAD OF BEHIND. PROBABLY THE BEST ADVICE TO FOLLOW WHEN CROPPING IS TO ELIMINATE SUBJECT MATTER THAT DOES NOT CONTRIBUTE TO THE STORY-TELLING QUALITY OF THE PRINT.

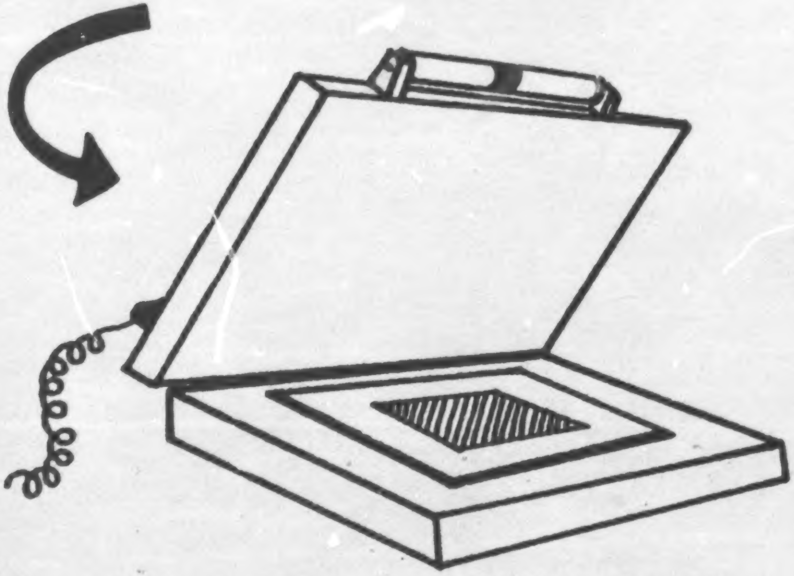
4. ONCE YOU HAVE FOUND THE BEST WAY TO CROP, CUT THE PRINT (ON THE PAPER CUTTER) TO THE DESIRED SIZE.

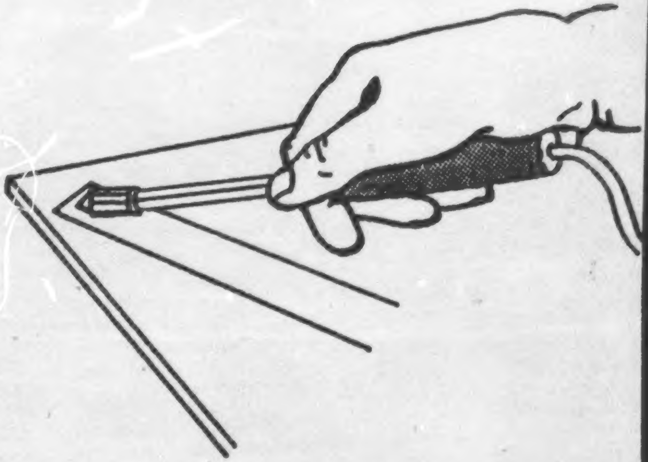
5. MOUNT THE PICTURE ON A PIECE OF MATBOARD (ASK INSTRUCTOR FOR MATERIALS).

NOTE: IF YOU HAVE A CHOICE IN SELECTING THE MAT COLOR, CHOOSE ONE WHICH ENHANCES THE MOOD OF YOUR PRINT. CONTRAST IS ALSO SOMETHING TO CONSIDER WHEN SELECTING MATBOARD. IF THE PRINT IS PREDOMINATELY DARK, A BRIGHT WHITE MATBOARD COULD BE A BIG PLUS.

JOB STEPS

6. TURN ON THE TACKING IRON AND THE DRY-MOUNTING PRESS. WHEN THE PRESS IS HEATED (ABOUT 30 MINUTES), PLACE THE MATBOARD AND PRINT IN THE PRESS AND COVER. ALLOW TO HEAT FOR 30-45 SECONDS. THIS REMOVES ANY MOISTURE IN THE BOARD AND PRINT.





7. WHEN THE TACKING IRON IS HOT ENOUGH, TACK THE MOUNTING TISSUE TO THE BACK OF THE PRINT IN THE FORM OF AN "X".

WORD GUIDE

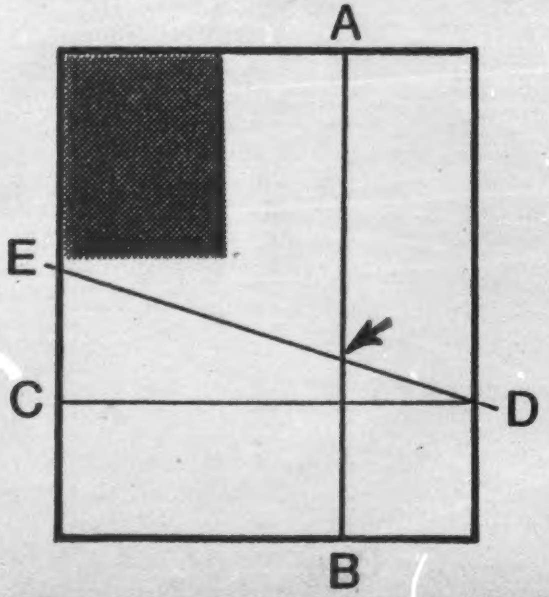
BISECTS - CUTS

ALIGN - PUT IN RIGHT POSITION

JOB STEPS

8. TRIM OFF THE EXCESS MOUNTING TISSUE.

9. NEXT, LOCATE THE AREA ON THE MATBOARD FOR MOUNTING. GENERALLY, THIS IS EQUALLY SPACED FROM BOTH SIDES, BUT RAISED A LITTLE FROM CENTER. SEE THE DRAWING FOR EXAMPLE.

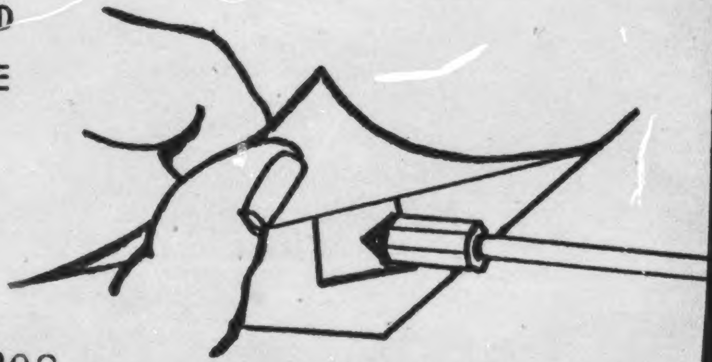


JOB STEPS

9. LINE AB BISECTS THE SPACE TO THE RIGHT OF THE PRINT, WHILE LINE CD BISECTS THE SPACE BELOW THE PRINT. DRAW A LINE FROM E, WHICH IS THE LOWER LEFT CORNER OF THE PRINT, TO D. WHERE THAT LINE INTERSECTS AB IS THE LOCATION OF THE BOTTOM RIGHT CORNER OF THE PRINT.

   IF YOU WANT TO KEEP THE PRINT PERFECTLY CENTERED, JUST PLACE THE PRINT'S BOTTOM RIGHT CORNER AT THE INTERSECTION OF AB AND CD.

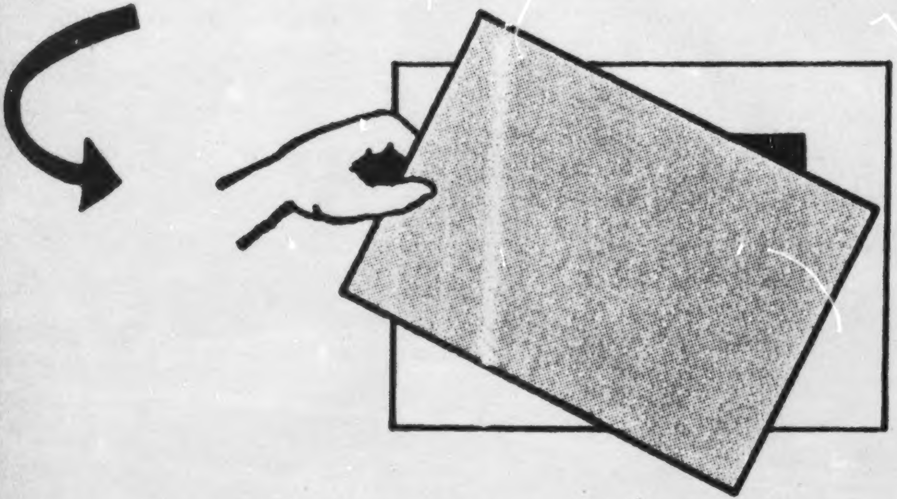
10. WITH THE PRINT HELD IN PLACE, RAISE A CORNER OF THE PRINT AND TACK THE MOUNTING TISSUE TO THE MOUNTING BOARD. REPEAT WITH AT LEAST ONE CORNER TO PREVENT THE PRINT FROM SLIPPING.



JOB STEPS

11. PUT THE PHOTO AND MOUNTING BOARD IN THE PRESS (PHOTO SIDE UP).

12. COVER THE PRINT WITH CLEAN, WAX-FREE PAPER.



13. CLOSE THE PRESS AND WAIT THE TIME SUGGESTED BY THE INSTRUCTOR.

NOTE: IF WHEN YOU REMOVE THE PRINT FROM THE PRESS, IT FAILS TO REMAIN ATTACHED TO THE BOARD, THEN MORE TIME IN THE PRESS IS NEEDED.

JOB STEPS

14. REMOVE THE MOUNTED PICTURE FROM THE PRESS AND PLACE A WEIGHT OVER IT TO HOLD IT FLAT WHILE IT COOLS.

15. DISPLAY YOUR PRINT.

16. AFTER YOU HAVE SET YOUR DISPLAY, SHOW IT TO THE INSTRUCTOR.